



EPA Region 5 Records Ctr.



360057

March 29, 2007

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Bureau Veritas Project No. 07003-003095.17-001

Subject: **ILR000128249 – Madison County – LPC 1190505040**
The Hartford Area Hydrocarbon Plume Site / Hartford, Illinois
Quarterly Groundwater Monitoring Report – January 2007

Dear Messrs. Turner and Faryan:

Bureau Veritas North America, Inc. (Bureau Veritas) (formerly Clayton Group Services, Inc.), on behalf of the Hartford Working Group (HWG), and as presented in the January 4, 2006 Dissolved Phase Groundwater Investigation Report, is submitting this Quarterly Groundwater Monitoring Report for the 1st Quarter of 2007. The activities presented in this report were completed in accordance with the Dissolved Phase Groundwater Investigation Report.

The extent of the dissolved phase plume appears to be defined within the available area of investigation. The findings of the investigation are generally consistent with the northerly flow of groundwater in this area. The plume is bounded by approximately Hawthorne Street to the south and along portions of Illinois Route 3 to the west. The Hartford Municipal Wells have not been impacted by the LNAPL.

Based on historical general chemistry and natural attenuation data, the HWG proposes to reduce the 2007 sampling frequency for these parameters from quarterly to annually (4th quarter only). These modifications are based on the general consistency of groundwater concentration data over the course of monitoring. Future sampling of these parameters may be re-evaluated based on documented changes in groundwater concentration trends or the general conceptual site model.

An evaluation of the historical groundwater analytical results indicates that, of the Skinner List metal parameters, only arsenic and lead have exhibited concentrations above comparison values (TACO Tier 1 GROs for Class I Groundwater) on a consistent, non-sporadic basis. Therefore, it is proposed that future quarterly monitoring groundwater samples be submitted for laboratory analysis of BETX, MTBE, arsenic (total and dissolved) and lead (total and dissolved). Future annual sampling (4th Quarter) will include general chemistry and natural attenuation parameters.

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Messrs. Turner and Faryan
USEPA REGION V
Quarterly Groundwater Mon. Report (Jan. 2007)

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The new parameter list is proposed for implementation during the next quarterly groundwater monitoring sampling event (Second Quarter 2007). This event will be conducted in accordance with the January 2006 Dissolved Phase Groundwater Investigation Report.

Please contact me with any questions.

Sincerely,

Monte M. Nienkerk, P.G.
Director
Bureau Veritas North America, Inc.
Health, Safety, and Environmental Services

Encl: Quarterly Groundwater Monitoring Report – January 2007
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Quarterly Groundwater Monitoring Report January 2007

**1190505040 -- Madison County -- ILR000128249
The Hartford Area Hydrocarbon Plume Site
Hartford, Illinois**

March 29, 2007
Bureau Veritas Project No. 07003-003095.17-001



Prepared for:
The Hartford Working Group
Hartford, Illinois

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EXECUTIVE SUMMARY

This January 2007 Quarterly Groundwater Monitoring Report, prepared for The Hartford Area Hydrocarbon Plume Site (Site) in Hartford, Illinois, focused on monitoring conditions along the perimeter of the dissolved phase plume in northern Hartford.

The Site geology consists of alternating alluvial deposits of clay and silt. This alluvium overlies alluvial sands and sandy glacial outwash that ranges from 60 to 130 feet thick and is known, locally, as the Main Sand. The overlying permeable zones within the alluvium are locally known (in descending order) as the North Olive, the Rand and the EPA Strata. These deposits are overlain and bounded by several clay deposits identified (in descending order) as the A Clay Stratum, which overlies the entire Site, and localized deposits of the B Clay, the C Clay and the D Clay Strata. The regionally extensive Main Sand underlies the fine-grained alluvial deposits.

Gauging results indicated that light non-aqueous phase liquid (LNAPL) was primarily found in the combined EPA and Main Sand Strata, and was limited in Hartford to south of Rand Avenue, east of Illinois State Route 3 and north of East Maple Street. Localized identifications of LNAPL were found in the Rand Stratum at the northeast corner of the Site. The extent of the dissolved phase hydrocarbon plume appears to be defined within the available area of investigation.

Groundwater analytical results along the southern and western boundaries of the interpreted extent of the ROST response showed no indications of dissolved phase hydrocarbons. Groundwater analytical results along the northern and eastern boundaries of the Site indicated the presence of dissolved phase hydrocarbon concentrations above groundwater comparison values. The groundwater analytical results revealed that methyl tert-butyl ether (MTBE) was detected in HMW-49C at a concentration above the comparison value, and in HMW-49D and HMW-50C at concentrations below the comparison value.



1.0 INTRODUCTION

This Quarterly Groundwater Monitoring Report, prepared for The Hartford Area Hydrocarbon Plume Site (Site) in Hartford, Illinois (Figure 1) focused on monitoring conditions along the perimeter of the dissolved phase plume which has formed as a result of the presence of light non-aqueous phase liquid (LNAPL) in northern Hartford (Clayton, 2006). This report was prepared by Bureau Veritas North America, Inc. (Bureau Veritas), formerly Clayton Group Services, Inc. (Clayton), on behalf of the Hartford Working Group (HWG). The HWG is comprised of the Atlantic Richfield Company (Atlantic Richfield), The Premcor Refining Group Inc. (Premcor), Shell Oil Products US (Shell), and Sinclair Oil Corporation (Sinclair).

The hydrogeology in the northernmost area of Hartford consists of four hydrostratigraphic units identified in descending order as the North Olive, the Rand and the EPA Strata, all of which overlie the Main Sand. The Main Sand has been subdivided into Main Silt and Main Sand based on its composition (i.e., percentage of silt versus sand content). These four hydrostratigraphic units are overlain and bounded by several clay deposits identified (in descending order) as the A Clay, B Clay, C Clay, and D Clay. The A Clay forms the surface layer over the entirety of northern Hartford while the B Clay separates the North Olive and Rand Strata. Scattered areas of fill are present within the A Clay. The C Clay separates the Rand and EPA Strata, and the D Clay separates the EPA Stratum and the Main Sand. More detailed information on the hydrostratigraphic units at the Site is provided in the December 2005 *LNAPL Active Recovery System Conceptual Site Model* (Clayton 2005) and the January 2006 *Dissolved Phase Groundwater Investigation Report* (Clayton, 2006).

Quarterly groundwater sampling of existing wells (that do not contain LNAPL) within the four hydrostratigraphic units in Hartford has been on-going since December 2003. As wells have been installed as part of investigative activities during 2004 through 2006, they have been incorporated into the quarterly monitoring program. As proposed in the Dissolved Phase Groundwater Investigation Report (Clayton, 2006), a select number of monitoring wells continue to be sampled and analyzed on a quarterly basis to monitor conditions along the perimeter of the dissolved phase plume. An additional select number of monitoring wells will be sampled and analyzed on an annual basis. The quarterly sampling includes selected wells screened in the Rand, EPA and Main Sand Strata, located beyond the interpreted extent of free product. The annual sampling includes selected wells, if free of LNAPL, throughout



northern Hartford. Wells in the North Olive Stratum are included in the groundwater-sampling program; however, as water in this unit is seasonal or ephemeral and occurs as isolated areas of perched water, groundwater is typically not present during sampling events. A list summarizing the wells included in quarterly sampling is provided in Table 1 and the well locations are shown in Figure 2.

This report presents the results of the first quarter groundwater monitoring activities performed January 9 through 17, 2007 and was done in accordance with the monitoring program presented in Clayton's (2006) Dissolved Phase Groundwater Investigation Report. A discussion of the comprehensive well gauging, groundwater sample collection, groundwater analytical results, and conclusions is presented in Sections 2.0 through 5.0, respectively. Recommendations and future activities are presented in Section 6.0 and references are presented in Section 7.0.

2.0 WELL GAUGING

Gauged monitoring wells were inspected and evaluated with respect to their continued suitability for groundwater monitoring. The wells were determined to be in satisfactory condition for continued use in the monitoring program. The results of the monitoring well inspections are included in Appendix A.

Monitoring well gauging was conducted to determine groundwater depths and LNAPL specific thickness (D_o) (if present) in order to determine groundwater flow directions and delineate the current horizontal extent of gauged LNAPL. D_o is a normalized volume of LNAPL (ft^3/ft^2) per unit surface area but is expressed as a thickness (in units of feet). The gauging was performed at wells installed in the North Olive, Rand, EPA, and Main Sand Strata. Gauged monitoring wells were located in Hartford at the Shell Rand Avenue site, the Shell Tannery Property and the Premcor Facility. The Shell sites are located immediately to the northeast and east of the north half of Hartford, while the Premcor Facility is immediately east of the central portion of Hartford. As part of the well gauging event, the Mississippi River elevation (at the Premcor Mississippi River Dock) was surveyed by CMT, Inc. on January 9, 2007.

The January 2007 groundwater and LNAPL gauging data from Hartford are summarized in Table 2. Monitoring well gauging data for the Shell wells and the wells on the Premcor facility are summarized in Tables 3 and 4, respectively. A January 2007 groundwater elevation map was created for the North Olive Stratum and is presented in Figure 3. Groundwater flow maps, constructed for the



January 2007 gauging event for the Rand, combined EPA and Main Sand, and Main Sand Strata, are presented in Figures 4, 5 and 6, respectively. A discussion of the groundwater gauging data is presented below. A discussion of the LNAPL extent and specific thickness, including figures, is in Appendix B.

Groundwater within the North Olive Stratum, which is potentially seasonal or more ephemeral, occurs as isolated areas of perched water on the surface of the underlying B Clay Stratum in Hartford. Historical data has not indicated any significant areas of continually perched water in this stratum. The January 2007 well gauging for the North Olive Stratum revealed that the locations where groundwater was encountered were generally scattered with only small, localized areas that contained water levels above the stratum base. Therefore, the groundwater map created for the North Olive Stratum presents only the elevation data where groundwater was present and the saturated thickness was above the stratum base (reference Figure 3).

Groundwater within the Rand Stratum in Hartford is also considered to represent localized areas of potentially seasonal or more ephemeral perched water on the surface of the underlying C Clay Strata. Groundwater in the Rand Stratum appears to be confined northeast of Hartford at the Shell sites, though this is the only area where the Rand Stratum was extensively saturated. Therefore, the groundwater flow map created for the Rand Stratum, in general, does not contour elevation data for monitoring well locations south of Birch Street. The January 2007 groundwater flow map indicates the presence of a groundwater mound located northeast of the Site (reference Figure 4). Groundwater flows radially away from this mound towards the northeast, southeast, west-northwest, and southwest. Groundwater from this mound extends and flows southwest into the Village and is controlled by the topography of the base of the Rand Stratum.

Groundwater within the EPA Stratum is generally confined and hydraulically connected to the Main Sand in northeastern Hartford, on the Shell Tannery Property, the Shell Rand Avenue Site, and the Premcor facility. The January 2007 groundwater flow map of the combined EPA and Main Sand Strata indicates the presence of a groundwater divide, located northeast of the Site, trending along a general northwest/southeast axis (reference Figure 5). Groundwater on the eastern side of the divide flows in a northeasterly direction while flow on the western side of the divide is in a southwesterly direction. However, as the southwesterly flow reaches beyond the extent of the D Clay Stratum, at the northwestern portion of the study area, it then flows north to northwestward within the hydraulically connected



Main Sand. A portion is also captured in the west portion of the Premcor facility (which includes Production Wells P-1/P-2 and P-6, screened between approximately 84 to 114 feet below ground surface [bgs] in the Main Sand, and Shallow Pumping Well RPW-01 screened between approximately 32 to 72 feet bgs in the EPA Stratum and the Main Sand).

The January 2007 groundwater flow map for the Main Sand indicates the flow direction underlying Hartford was primarily northerly with localized variable flow directions in the vicinity of and towards Production Wells P-1/P-2 and Shallow Pumping Well RPW-01 located in the northwestern portion of the Premcor Facility, north of East Hawthorne Street (reference Figure 6). Hartford Municipal Well #4 was operating at the time of groundwater elevation gauging in January 2007. The overall groundwater flow direction in January 2007 was consistent with historical interpretations. The Mississippi River did not appear to exert a significant influence on groundwater flow in the Rand or EPA Strata, though it did appear to exert some influence on flow in the Main Sand in January 2007.

3.0 GROUNDWATER SAMPLE COLLECTION

Quarterly groundwater samples were collected from eighteen wells (including the five Sentinel Wells) during the first quarter of 2007. None of the wells completed in the North Olive Stratum were sampled due to the absence of groundwater in this unit. A limited number of wells completed in the Rand and EPA Strata were sampled due to the units' limited presence in the area, the presence of free product in some wells, and/or wells being dry or having limited available water. The majority of the wells included in quarterly sampling are in the Main Sand. A summary list of wells included in the quarterly groundwater sampling and their sampling status as of first quarter 2007 is provided in Table 1.

First quarter 2007 groundwater sample collection activities were conducted on January 15 for EPA Stratum wells HMW-49B (screened in the B/C clay) and HMW-50B and Main Sand wells HMW-25, HMW-26, HMW-27, HMW-28, HMW-39B, and HMW-39C; on January 16 for Rand Stratum well HMW-50A, EPA Stratum well HMW-49C, and Main Sand wells HMW-29, HMW-40C, HMW-49D, HMW-50C, MP-81C, MP-89C, and MP-92D; and on January 17 for Main Sand well HMW-52C. Eleven wells included in the quarterly groundwater sampling program were not sampled in January 2007.



because they were dry (MP-81A, MP-81B, and MP-89B) or contained an insufficient amount of water for sampling (HMW-39A, HMW-40A, HMW-40B, HMW-49A, HMW-52A, HMW-52B, MP-89A, and MP-92C).

Monitoring well purging and sampling were performed using dedicated low-flow sampling pumps and polypropylene tubing, in accordance with Bureau Veritas' purging and sampling Standard Operating Procedure (SOP) 415a, where applicable. A peristaltic pump and/or bailer were used for purging and sampling at locations where low-flow purging/sampling was not applicable. A flow chart illustrating the SOP 415a purging and sampling technique is presented in Appendix C. Upon collection, groundwater samples were placed in laboratory-supplied, pre-preserved (if appropriate) containers. After collection, samples were immediately labeled, placed in a cooler containing ice and delivered under chain-of-custody procedures to Teklab, Inc. of Collinsville, Illinois for laboratory analysis. The purged groundwater removed from each well was temporarily stored in a tank, equipped with secondary containment and located in a secure area within the Village of Hartford before removal by a waste disposal contractor.

Water quality indicator parameters including temperature, pH, oxidation-reduction potential, dissolved oxygen, turbidity, and specific conductivity were electronically measured and recorded using a calibrated Mini-Troll with an associated Pocket PC (in addition to the field logbook) during purging and prior to low-flow sampling. The downloaded data logger indicator parameter records for the January 2007 event are included in Appendix D. The remaining well records, measured with a Horiba U-10, are also in Appendix D.

Quarterly groundwater samples were analyzed for benzene, ethylbenzene, toluene and total xylenes (BETX), methyl tert-butyl ether (MTBE), Skinner List Metals (total and dissolved) along with general chemistry and natural attenuation parameters, as described in Clayton's (2006) Dissolved Phase Groundwater Investigation Report. The practical quantitation limits and analytical methods are presented in Table 5. The containers with applicable preservation requirements (if appropriate) for each parameter are presented in Table 6.



4.0 GROUNDWATER ANALYTICAL RESULTS

In January 2007, the first quarter groundwater sampling included a total of 18 wells:

- The Rand Stratum groundwater sample data set included one well: HMW-50A.
- The EPA Stratum groundwater sample data set included three wells: HMW-49B (screened in the B/C clay), HMW-49C and HMW-50B.
- The Main Sand groundwater sample data set included fourteen wells: HMW-25, HMW-26, HMW-27, HMW-28, HMW-29, HMW-39B, HMW-39C, HMW-40C, HMW-49D, HMW-50C, HMW-52C, MP-81C, MP-89C, and MP-92D.

All of the wells sampled during the January 2007 quarterly event were located beyond the interpreted extent of free product, as verified through groundwater gauging efforts.

Groundwater quality values listed in 35 Illinois Administrative Code (IAC) Part 742 (Tiered Approach to Corrective Action Objectives [TACO] Tier 1 Groundwater Remediation Objectives [GROs] for Class I groundwater [Illinois Pollution Control Board, 1997]) were used as comparison values only for evaluating the January 2007 groundwater analytical results. These results were consistent with historical trends. The January 2007 results for BETX and MTBE, Skinner List Metals, General Chemistry and Natural Attenuation Parameters and Indicator Parameters are provided in Tables 7 through 10, respectively. Summaries of the first quarter 2007 groundwater analytical results (benzene, MTBE, total BETX, total lead, and dissolved lead concentrations) for the Rand Stratum, EPA Stratum and Main Sand are presented in Figures 7, 8 and 9, respectively. The laboratory analytical results were provided electronically to the United States Environmental Protection Agency (USEPA) and the Illinois Environmental Protection Agency (Illinois EPA) as they were received from the laboratory. Paper copies of the laboratory analytical reports are maintained at Bureau Veritas' office in Downers Grove, Illinois. A discussion of the January 2007 results for BETX, MTBE and Skinner List Metals (total and dissolved) is presented below.

No detectable concentrations of BETX constituents were present in the samples collected from fourteen wells: Rand Stratum well HMW-50A, EPA Stratum well HMW-50B, and Main Sand wells HMW-25, HMW-26, HMW-27, HMW-28, HMW-29, HMW-39B, HMW-39C, HMW-40C, HMW-52C, MP-81C, MP-89C, and MP-92D. BETX constituents were detected in samples from four wells: EPA Stratum wells HMW-49B (screened in B/C clay) [515.9 micrograms per liter ($\mu\text{g}/\text{L}$)] and HMW-49C (10,064 $\mu\text{g}/\text{L}$) and in



Main Sand wells HMW-49D (134.8 J µg/L) and HMW-50C (144.6 µg/L). The "J" qualifier for the BETX concentration in sample HMW-49D is in reference to the concentration of ethylbenzene (1.8 J µg/L), which was present at an estimated concentration below its reporting limit (5 µg/L). None of the total BETX concentrations detected were above the comparison value (11,705 µg/L). Samples from four wells contained concentrations of benzene above the comparison value (5 µg/L): EPA Stratum wells HMW-49B (screened in B/C clay) (73.1 µg/L) and HMW-49C (304 µg/L) and Main Sand wells HMW-49D (116 µg/L) and HMW-50C (127 µg/L).

No detectable concentrations of MTBE were present in samples collected from fifteen wells: Rand Stratum well HMW-50A, EPA Stratum wells HMW-49B (screened in B/C clay) and HMW-50B, and Main Sand wells HMW-25 through HMW-29, HMW-39B, HMW-39C, HMW-40C, HMW-52C, MP-81C, MP-89C, and MP-92D. Samples from two Main Sand wells, HMW-49D (37.2 µg/L) and HMW-50C (6.3 µg/L), contained concentrations of MTBE below the comparison value (70 µg/L). The sample from EPA Stratum well HMW-49C (404 µg/L) contained a concentration of MTBE above the comparison value (70 µg/L). Historically, MTBE has not been associated with the LNAPL in northern Hartford. In general, the presence of MTBE is sporadic and concentrations have historically decreased with increasing depth, as shown at well nest HMW-49.

A total of 13 metals (antimony, arsenic, barium, beryllium, cadmium, chromium, cobalt, iron, lead, nickel, selenium, vanadium, and zinc) were detected in the samples from the 18 wells collected in January 2007. Four of the metals (arsenic, iron, lead, and selenium) were present at concentrations above comparison values:

- Total arsenic was present above the comparison value [0.05 milligrams per liter (mg/L)] in the sample from Main Sand Stratum well HMW-40C (0.440 mg/L).
- Total iron was present in samples from ten wells at concentrations above the comparison value 5 mg/L: EPA Stratum wells HMW-49B (screened in B/C clay) (30.3 mg/L), HMW-49C (31.4 mg/L) and HMW-50B (9.26 mg/L and 9.40 mg/L); and Main Sand Stratum wells HMW-26, HMW-29, HMW-40C, HMW-49D, HMW-52C, MP-89C, and MP-92D (ranging from 6.48 to 60.1 mg/L).
- Dissolved iron was present in samples from eight wells at concentrations above the comparison value (5 mg/L): EPA Stratum wells HMW-49B (screened in B/C clay) (28.7 mg/L) and HMW-49C (17.4 mg/L); and Main Sand Stratum wells HMW-26, HMW-29, HMW-49D, HMW-52C, MP-89C, and MP-92D (ranging from 6.74 to 28.4 mg/L).



- Total lead was present in samples from two wells at concentrations above the comparison value (0.0075 mg/L): EPA Stratum well HMW-49C (0.0226 mg/L); and Main Sand Stratum well HMW-52C (0.0268 mg/L).
- Dissolved lead was present above the comparison value (0.0075 mg/L) in the sample from EPA Stratum well HMW-49C (0.0129 mg/L).
- Total selenium was present above the comparison value (0.05 mg/L) in the sample from Main Sand Stratum well HMW-40C (0.116 mg/L).

An evaluation of the Quality Assurance/Quality Control samples from this monitoring event revealed no concerns.

As part of the Site investigation, quarterly groundwater sampling of existing wells (without LNAPL) has been ongoing since December 2003. As wells were installed as part of investigative activities they were incorporated into the former quarterly monitoring program. The inclusive data set for December 2003 through January 2007 consists of a total of 107 different wells (63 Main Sand wells, 10 EPA Stratum wells, 30 Rand Stratum wells, and 4 North Olive Stratum wells). Summary tables presenting the previous four quarters of historic groundwater analytical results for BETX constituents and MTBE, metals (total and dissolved), and general chemistry and natural attenuation parameters, are presented in Appendix E for reference. Figures illustrating the historic summary of groundwater analytical results (benzene, MTBE, total BETX, total SVOCs, total lead, and dissolved lead) for each hydrostratigraphic unit, inclusive of the January 2007 quarterly results, are provided in Appendix F.

5.0 CONCLUSIONS

The first quarter 2007 groundwater gauging and sampling activities conducted in January focused on monitoring conditions along the perimeter of the dissolved phase plume. LNAPL was identified primarily in the combined EPA and Main Sand Strata (reference Appendix B). The extent of LNAPL in the combined EPA and Main Sand Strata was primarily north of East Maple Street, east of Illinois State Route 3 and south of Rand Avenue. The extent of LNAPL was limited to three wells in the Rand Stratum (HMW-4, MP-29C and MP-37C), located in the northeast corner of the Site. No measurable LNAPL was present in the North Olive Stratum or the Main Sand Stratum below the D Clay.



The conclusions drawn from the first quarter 2007 activities are consistent with Clayton's (2006) Dissolved Phase Groundwater Investigation Report. The extent of the dissolved phase hydrocarbon plume appears to be defined within the available area of investigation.

The following findings are consistent with groundwater flow in the Main Sand, which, based on a review of both historical and January 2007 flow mapping data, has consistently been northerly:

- The groundwater analytical results along the southern and western boundaries of the interpreted extent of the ROST response did not indicate the presence of dissolved phase hydrocarbons.
- The groundwater analytical results along the northern and eastern boundaries of the Site indicated the presence of dissolved phase hydrocarbon concentrations above applicable groundwater comparison values.

6.0 RECOMMENDATIONS AND FUTURE ACTIVITIES

In general, routine quarterly monitoring began in January 2005 and included BETX, MTBE, Skinner List total metals, Skinner List dissolved metals, and general chemistry (other parameters such as SVOCs were also analyzed during this period). Natural attenuation parameters were included beginning in July 2005.

Based on the historical general chemistry and natural attenuation data, the HWG proposes to reduce the sampling frequency for these parameters from quarterly to annually (4th quarter only), commencing second quarter 2007. These modifications are based on the general consistency of groundwater concentration data over the course of monitoring. Future sampling of these parameters may be reevaluated based on documented changes in groundwater concentration trends or the general conceptual site model.

An evaluation of the historical groundwater analytical results indicates that, of the Skinner List metal parameters, only arsenic and lead have exhibited concentrations above comparison values (TACO Tier 1 GROs for Class I Groundwater) on a consistent, non-sporadic basis. Therefore, it is proposed that future quarterly monitoring groundwater samples be submitted for laboratory analysis of BETX, MTBE, arsenic (total and dissolved) and lead (total and dissolved).



The new parameter list is proposed for implementation during the next quarterly groundwater monitoring sampling event (currently scheduled for April 2007). This event will be conducted in accordance with the January 2006 Dissolved Phase Groundwater Investigation Report (Clayton, 2006). A well gauging event will also be conducted for the Hartford, Shell and Premcor groundwater monitoring wells at that time.



7.0 REFERENCES

Clayton Group Services, Inc., December 15, 2005. *LNAPL Active Recovery System Conceptual Site Model, The Hartford Area Hydrocarbon Plume Site, Hartford, Illinois.*

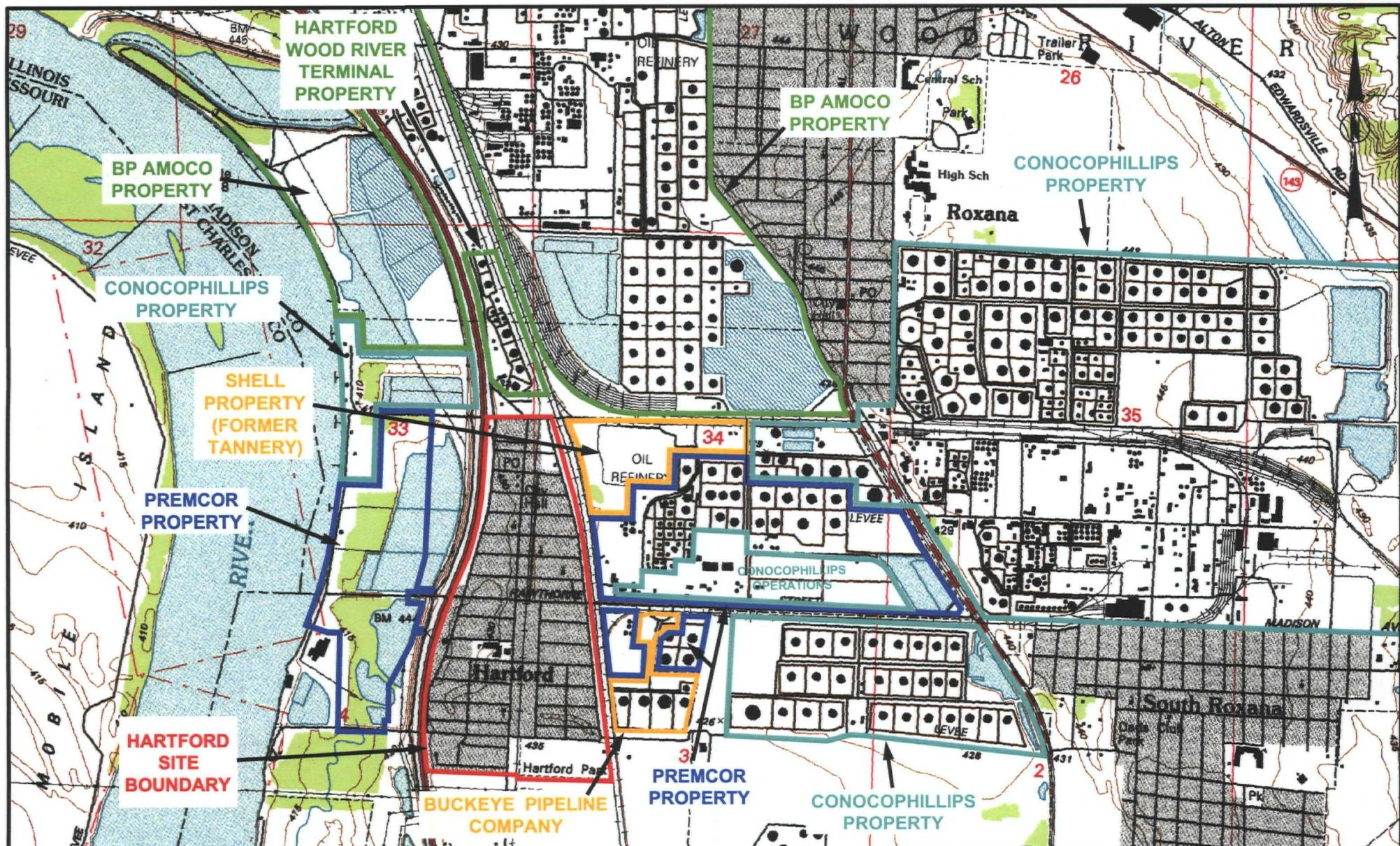
Clayton Group Services, Inc., January 4, 2006. *Dissolved Phase Groundwater Investigation Report for The Hartford Area Hydrocarbon Plume Site, Hartford, Illinois.*

Illinois Pollution Control Board, 1997. *Tiered Approach to Corrective Action Objectives: 35 IAC Part 742.* Adopted rule, Final Order June 5, 1997. Last amended February 2002.

United States Environmental Protection Agency, Region 5, Chicago, Illinois. *In the Matter of the Hartford Area Hydrocarbon Plume Site.* (Docket No. R7003-5-04-001).



FIGURES



** NOT TO SCALE **

SOURCE:

USGS 7.5 MINUTE SERIES TOPOGRAPHIC MAP
(WOOD RIVER, ILL.-MO. - rev.1994)

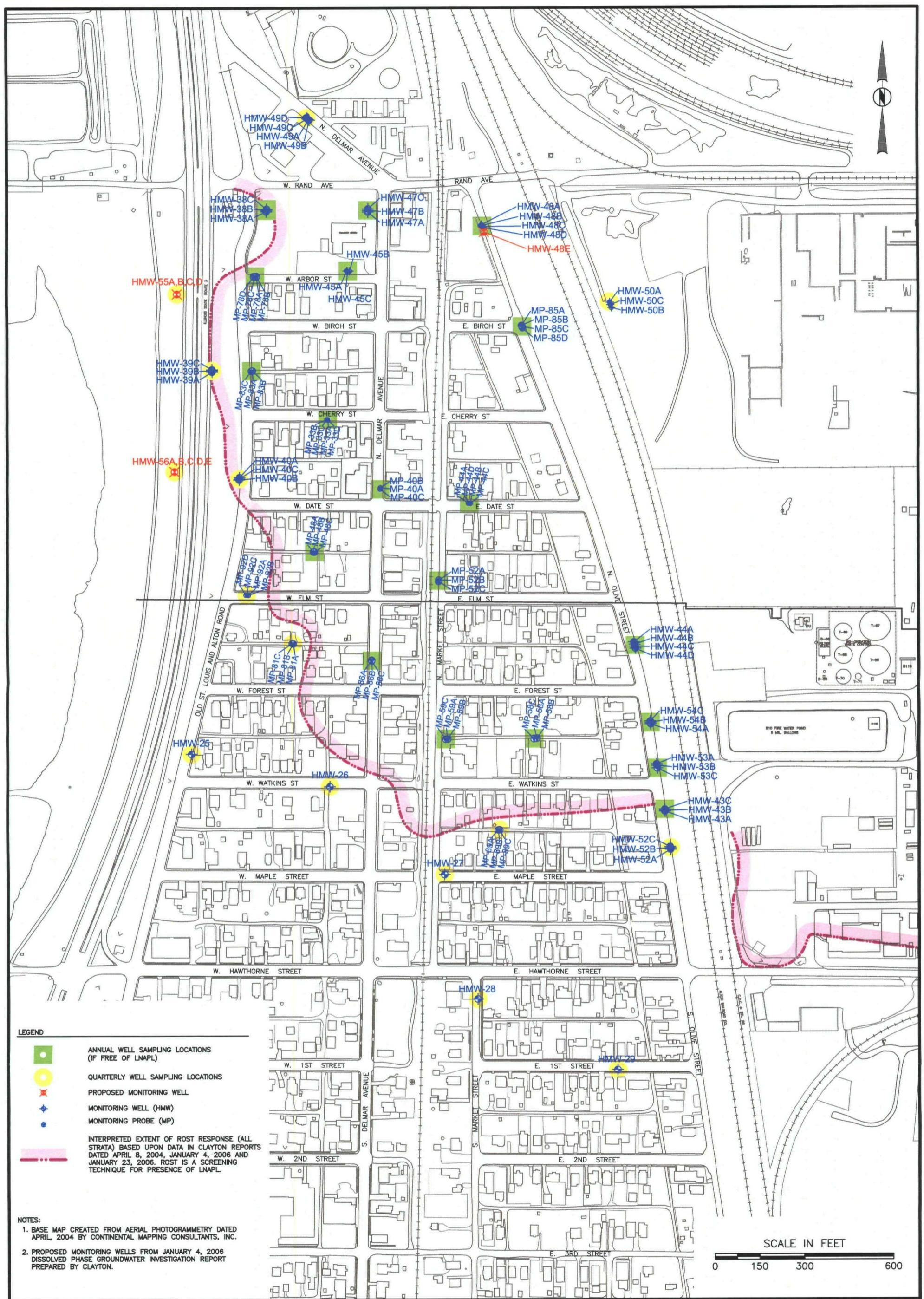
CHK BY
DWN BY BCP
DATE 8-8-06
SCALE AS SHOWN
CAD NO. 0309512001B
PRJ NO. 15-03095.14

VILLAGE OF HARTFORD, IL
AND SURROUNDING AREA MAP
THE HARTFORD AREA HYDROCARBON PLUME SITE
THE HARTFORD WORKING GROUP
HARTFORD, ILLINOIS



FIGURE

1



CHECK BY KDC	
DRAWN BY OS/BCP	
DATE 12-8-06	
SCALE AS SHOWN	
CAD NO. 0309514011K2	
PRJ NO. 003095.17	

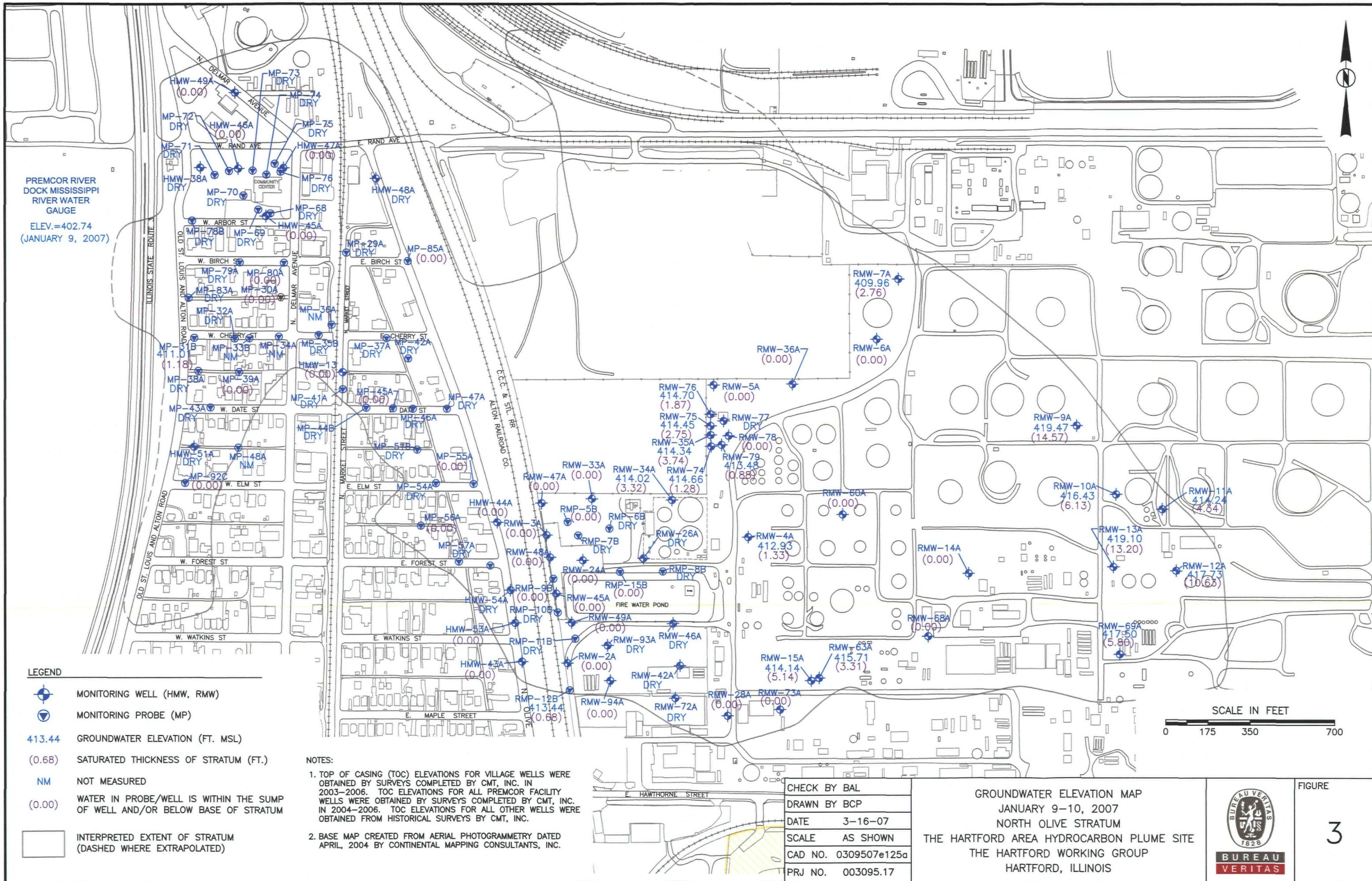
MONITORING WELL LOCATIONS FOR QUARTERLY/ANNUAL SAMPLING

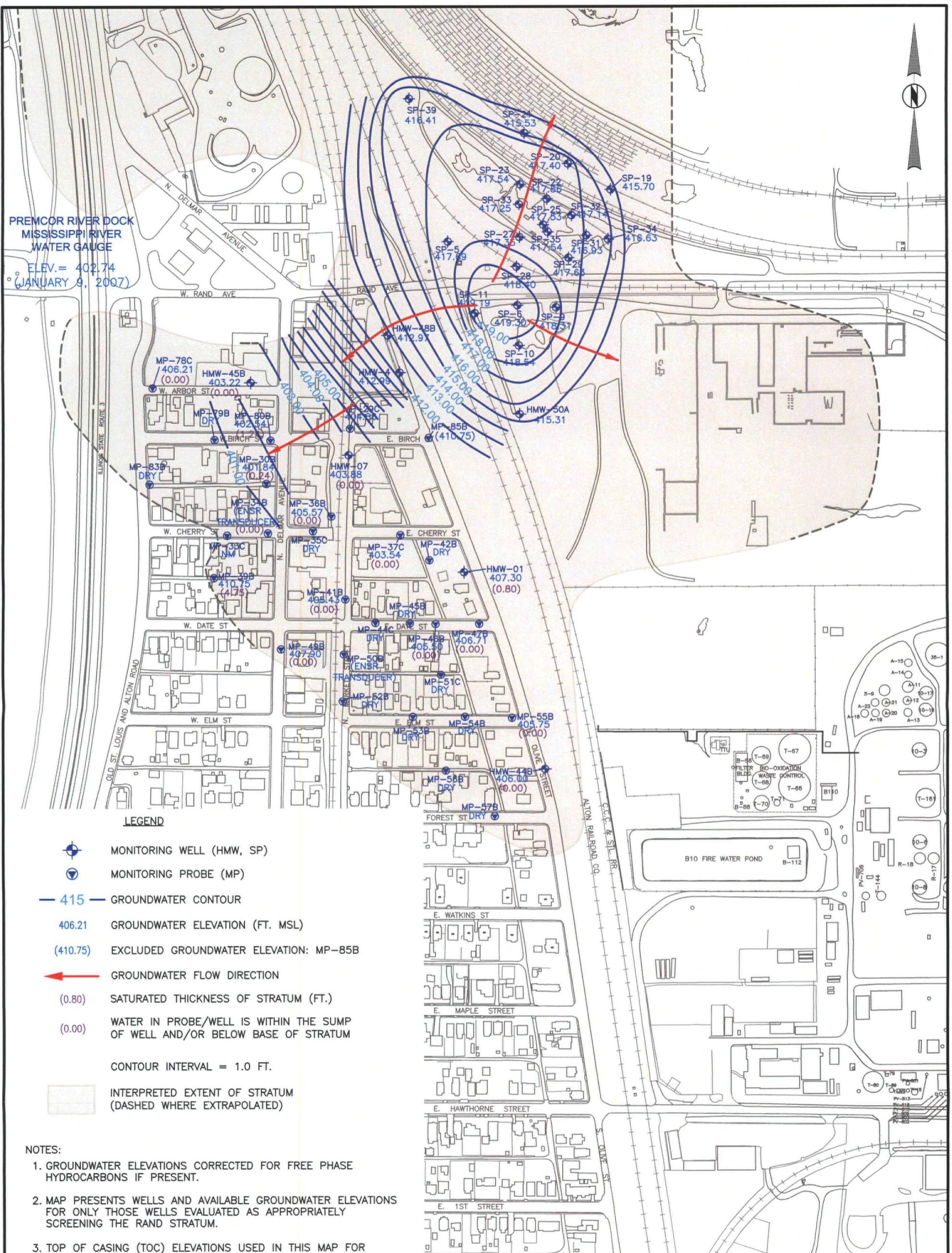
THE HARTFORD AREA HYDROCARBON PLUME SITE
THE HARTFORD WORKING GROUP
HARTFORD, ILLINOIS



BUREAU
VERITAS

2





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DRAWN BY BCP
DATE 2-8-07
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PRJ NO. 003095.17

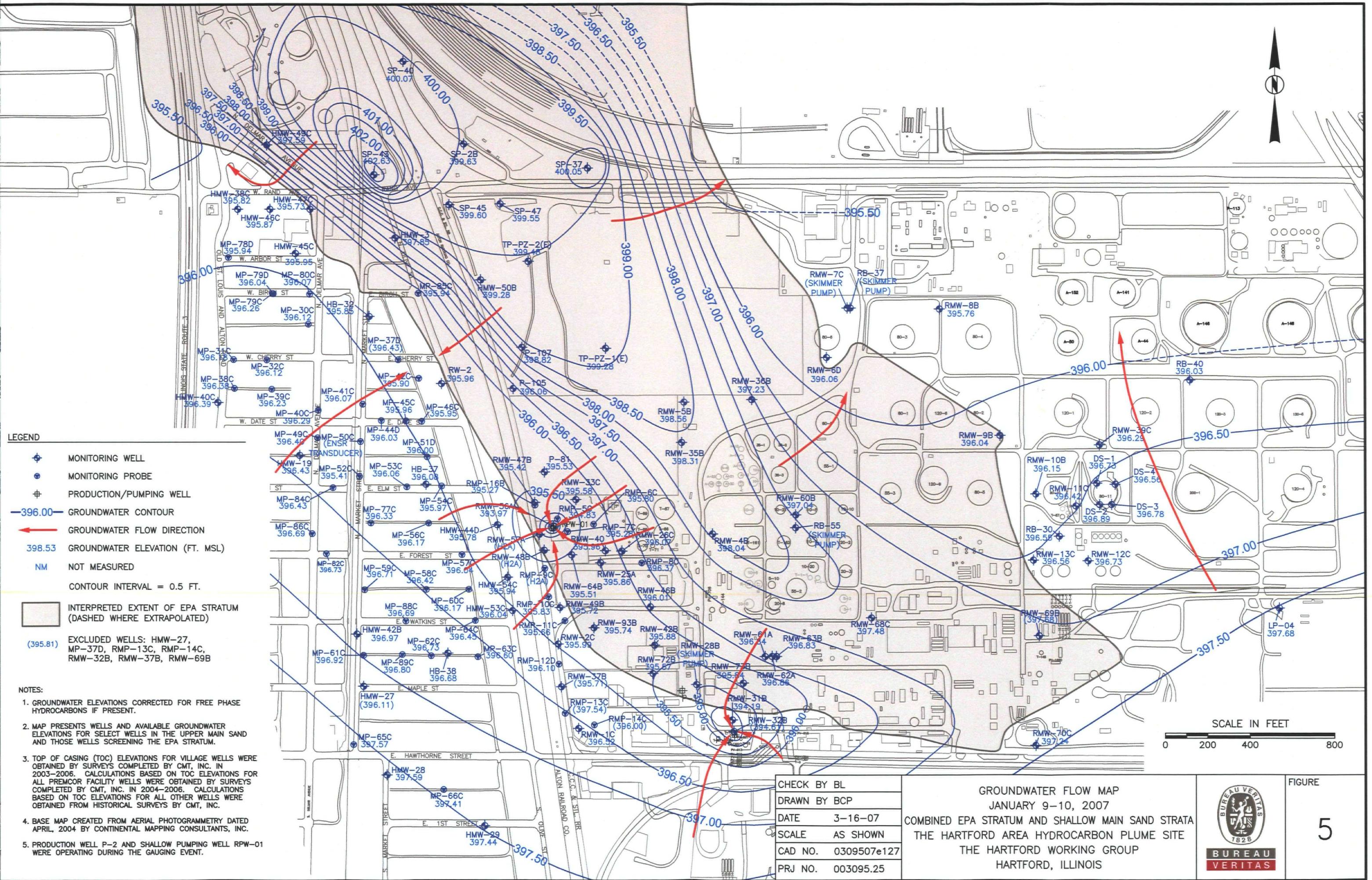
GROUNDWATER FLOW MAP
JANUARY 9-10, 2007
RAND STRATUM
THE HARTFORD AREA HYDROCARBON PLUME SITE
THE HARTFORD WORKING GROUP
HARTFORD, ILLINOIS

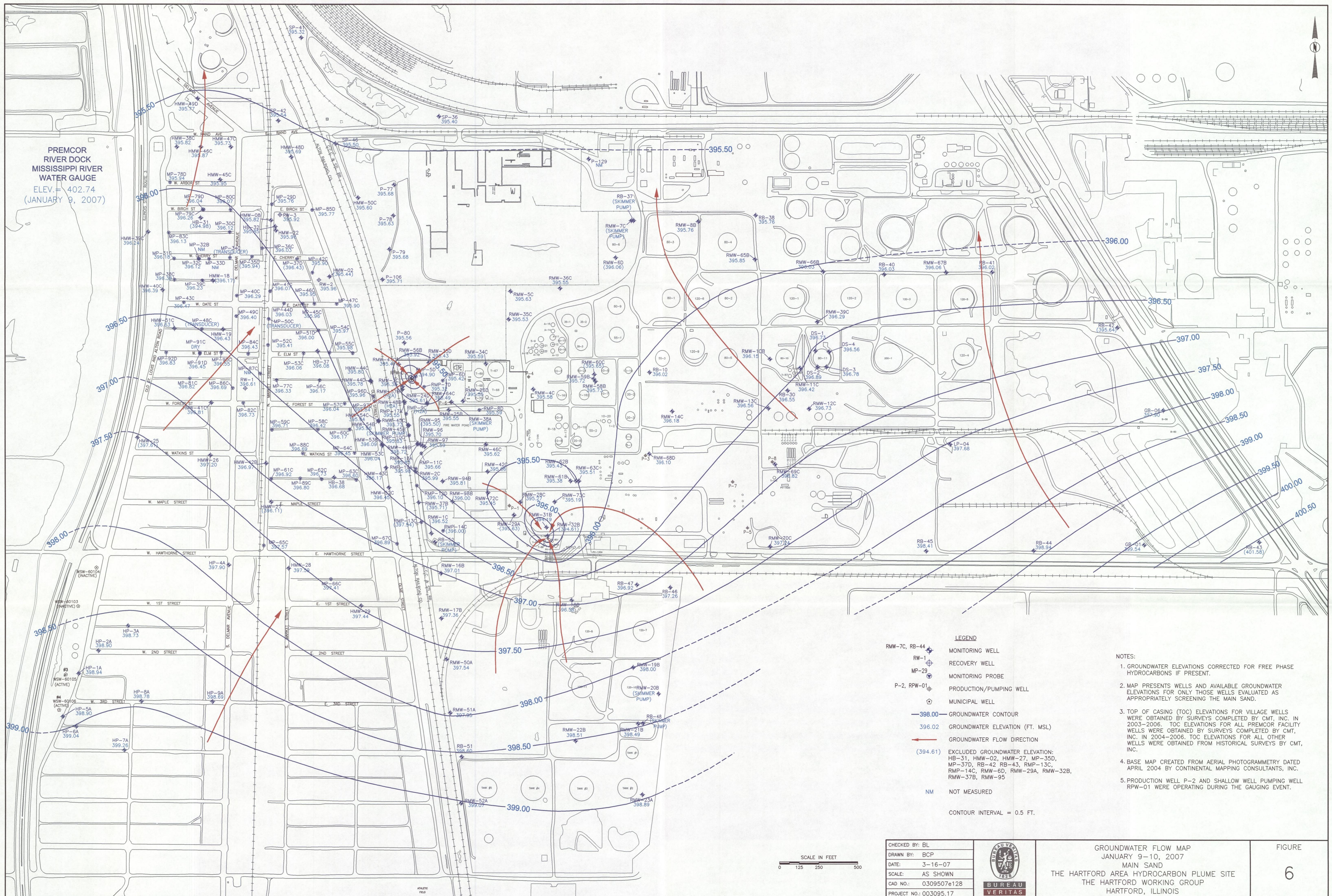


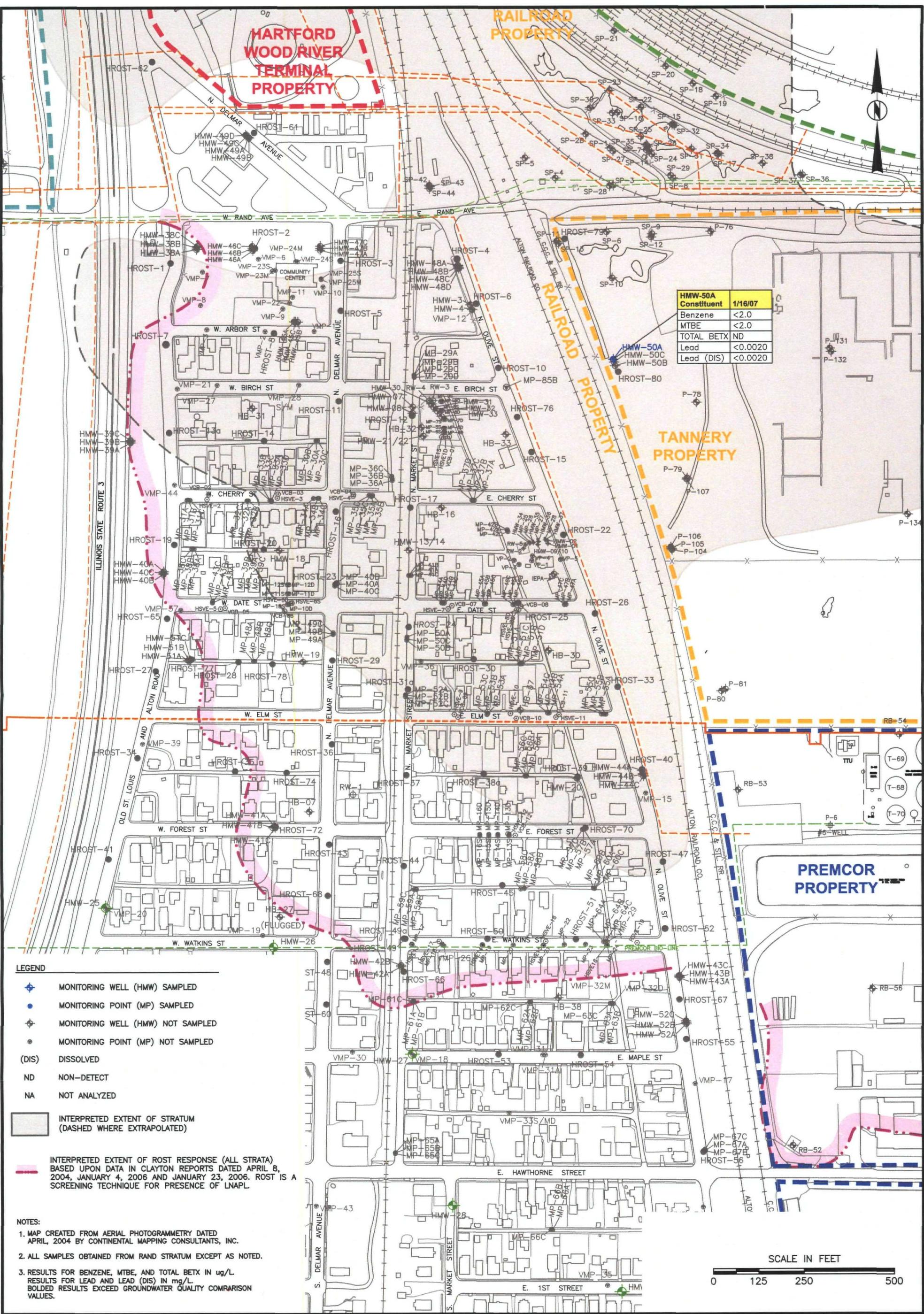
BUREAU
VERITAS

FIGURE

4







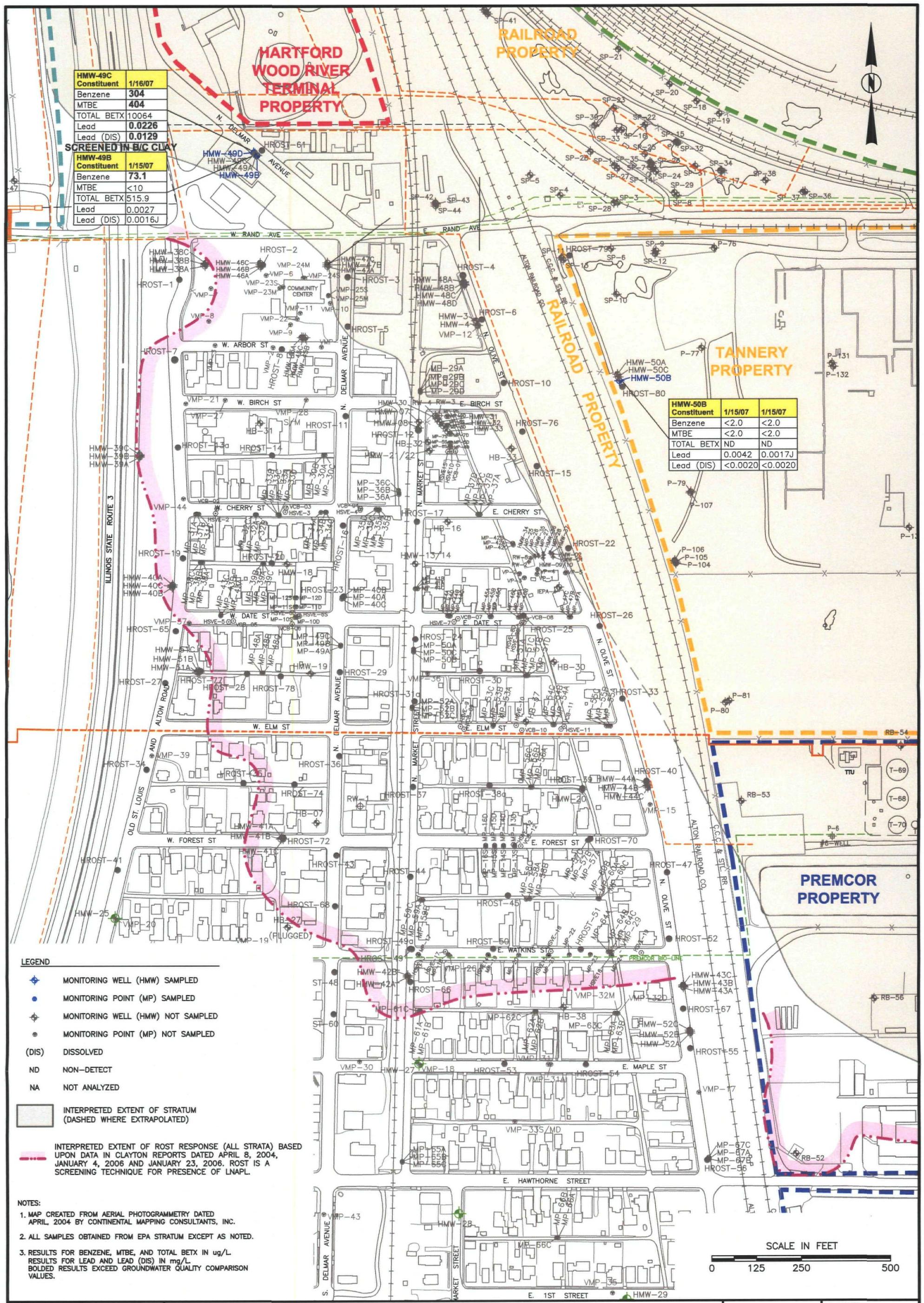
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GROUNDWATER ANALYTICAL RESULTS
JANUARY 2007
RAND STRATUM
THE HARTFORD AREA HYDROCARBON PLUME SITE
THE HARTFORD WORKING GROUP
HARTFORD, ILLINOIS



FIGURE

7



CHECK BY KDC	
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DATE 1-31-07	
SCALE AS SHOWN	
CAD NO. EPA_0107	
PRJ NO. 003095.17	

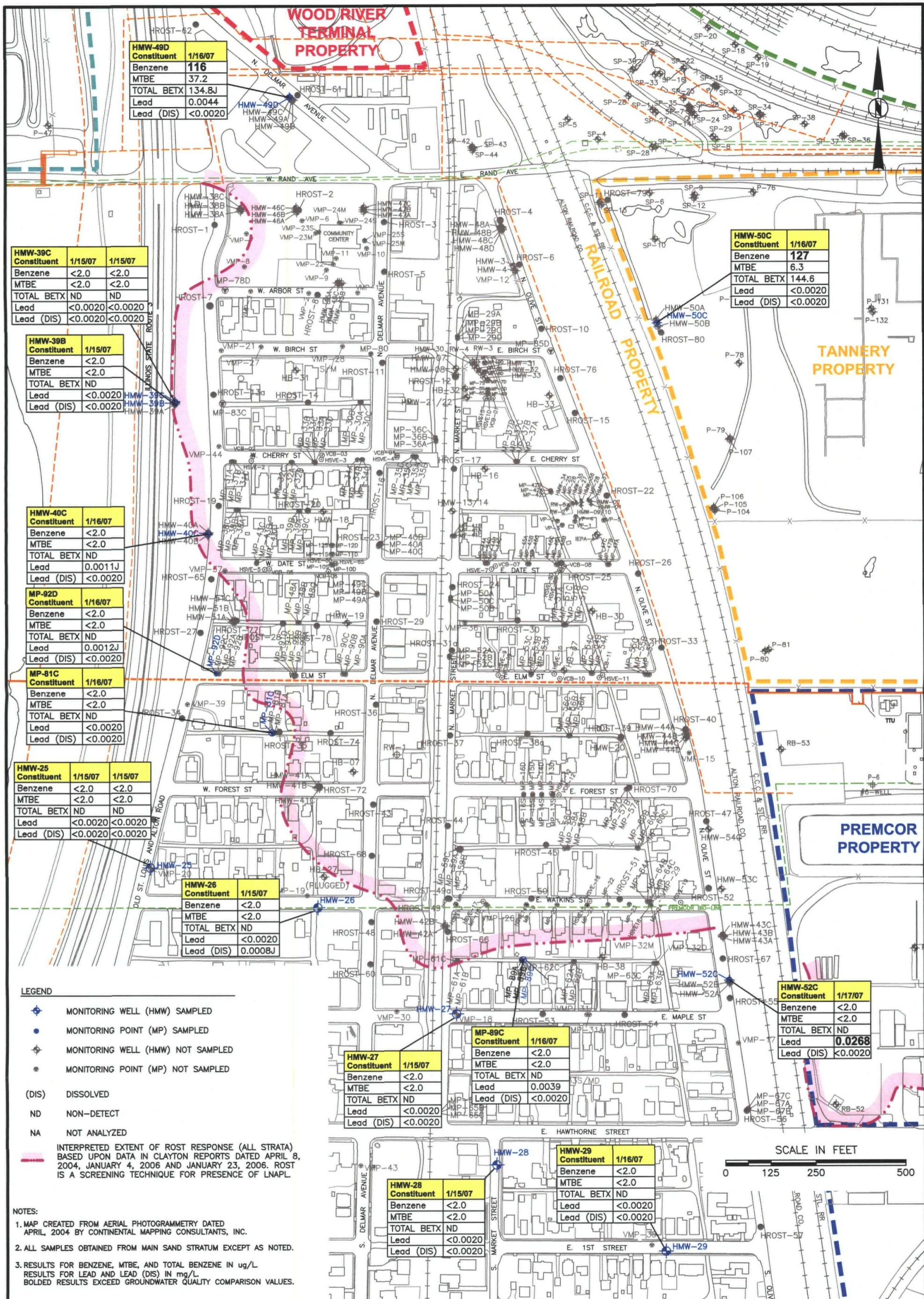
GROUNDWATER ANALYTICAL RESULTS
JANUARY 2007
EPA STRATUM
THE HARTFORD AREA HYDROCARBON PLUME SITE
THE HARTFORD WORKING GROUP
HARTFORD, ILLINOIS



FIGURE

8

BUREAU
VERITAS



CHECK BY KDC
DRAWN BY SK
DATE 1-31-07
SCALE AS SHOWN
CAD NO. MAINSAND_0107
PRJ NO. 15-03095.17.001

GROUNDWATER ANALYTICAL RESULTS
JANUARY 2007
MAIN SAND STRATUM
THE HARTFORD AREA HYDROCARBON PLUME SITE
THE HARTFORD WORKING GROUP
HARTFORD, ILLINOIS



FIGURE

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TABLES

TABLE 1
JANUARY 2007 GROUNDWATER SAMPLING WELL LIST
The Hartford Area Hydrocarbon Plume Site

1190505040 -- Madison County -- ILR000128249
 The Hartford Working Group / Hartford, IL

WELL LOCATIONS	STRATUM SCREENED	SENTINEL WELL QUARTERLY SAMPLING ^(a)	QUARTERLY SAMPLING	ANNUAL SAMPLING
HMW-25	Main Sand	S		
HMW-26	Main Sand	S		
HMW-27	Main Sand	S		
HMW-28	Main Sand	S		
HMW-29	Main Sand	S		
HMW-38A	N. Olive			X
HMW-38B	B/C Clay (PL in B/C Clay)			X
HMW-38C	Main Sand			X
HMW-39A	Main Silt (Rand Horizon)		NS	
HMW-39B	Main Silt (Rand Horizon)		S	
HMW-39C	Main Sand		S	
HMW-40A	A Clay		NS	
HMW-40B	Main Sand		NS	
HMW-40C	Main Sand		S	
HMW-43A	N. Olive			X
HMW-43B	B/C Clay (PL in B/C Clay)			X
HMW-43C	Main Sand			X
HMW-44A	N. Olive			X
HMW-44B	Rand			X
HMW-44C	Main Sand			X
HMW-44D	Main Sand (below LNAPL)			X
HMW-45A	N. Olive			X
HMW-45B	Rand			X
HMW-45C	Main Sand			X
HMW-47A	N. Olive			X
HMW-47B	B/C Clay (PL in B/C Clay)			X
HMW-47C	Main Sand			X
HMW-48A	N. Olive			X
HMW-48B	Rand			X
HMW-48C	EPA			X
HMW-48D	Main Sand (below D Clay)			X
HMW-48E	NI			NI
HMW-49A	N. Olive		NS	
HMW-49B	B/C Clay (PL in B/C Clay)		S	
HMW-49C	EPA		S	
HMW-49D	Main Sand (below D Clay)		S	
HMW-50A	Rand		S	
HMW-50B	EPA		S	
HMW-50C	Main Sand (below D Clay)		S	
HMW-52A	Main Silt (N. Olive Horizon)		NS	
HMW-52B	Main Silt (Rand Horizon)		NS	
HMW-52C	Main Sand		S	
HMW-53A	N. Olive			X
HMW-53B	Main Silt (Rand Horizon) / Main Sand			X

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WELL LOCATIONS	STRATUM SCREENED	SENTINEL WELL QUARTERLY SAMPLING ^(a)	QUARTERLY SAMPLING	ANNUAL SAMPLING
HMW-53C	Main Sand (below LNAPL)			X
HMW-54A	N. Olive			X
HMW-54B	Main Sand			X
HMW-54C	Main Sand (below LNAPL)			X
HMW-55A	NI		NI	
HMW-55B	NI		NI	
HMW-55C	NI		NI	
HMW-55D	NI		NI	
HMW-56A	NI		NI	
HMW-56B	NI		NI	
HMW-56C	NI		NI	
HMW-56D	NI		NI	
HMW-56E	NI		NI	
MP-33A	A Clay			X
MP-33B	N. Olive			X
MP-33C	Rand			X
MP-33D	Main Sand			X
MP-40A	A Clay (PL in A Clay)			X
MP-40B	Main Silt (Rand Horizon)			X
MP-40C	Main Sand			X
MP-44A	A Clay			X
MP-44B	N. Olive			X
MP-44C	Rand			X
MP-44D	Main Sand			X
MP-48A	N. Olive			X
MP-48B	Main Silt (Rand Horizon)			X
MP-48C	Main Sand			X
MP-52A	A Clay (PL in A Clay)			X
MP-52B	Rand			X
MP-52C	Main Sand			X
MP-58A	A Clay			X
MP-58B	Main Silt (Rand Horizon)			X
MP-58C	Main Sand			X
MP-59A	A Clay			X
MP-59B	Main Silt (Rand Horizon)			X
MP-59C	Main Sand			X
MP-78A	A Clay			X
MP-78B	N. Olive			X
MP-78C	Rand			X
MP-78D	Main Sand			X
MP-81A	A Clay (PL in A Clay)		NS	
MP-81B	Main Silt (Rand Horizon)		NS	
MP-81C	Main Sand		S	
MP-83A	N. Olive			X
MP-83B	Rand			X

TABLE 1
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The Hartford Area Hydrocarbon Plume Site

1190505040 -- Madison County -- ILR000128249
The Hartford Working Group / Hartford, IL

WELL LOCATIONS	STRATUM SCREENED	SENTINEL WELL QUARTERLY SAMPLING ^(a)	QUARTERLY SAMPLING	ANNUAL SAMPLING
MP-83C	Main Sand			X
MP-85A	N. Olive			X
MP-85B	Rand			X
MP-85C	EPA			X
MP-85D	Main Sand (below D Clay)			X
MP-86A	A Clay (PL in A Clay)			X
MP-86B	Main Silt (Rand Horizon)			X
MP-86C	Main Sand			X
MP-89A	A Clay		NS	
MP-89B	Main Silt (Rand Horizon)		NS	
MP-89C	Main Sand		S	
MP-92C	N. Olive		NS	
MP-92D	Main Silt (Rand Horizon) / Main Sand		S	

NOTES:

(a) = Sentinel Well Quarterly Sampling and Quarterly Sampling are reported under separate submittals, quarterly.

MP-92 A & B are probes which are not constructed to allow groundwater sampling.

S = Well sampled.

NS = Well not sampled due to being dry or containing an insufficient amount of water for sampling.

P = Well not sampled due to product present.

NI = Well proposed to be installed and included in future sampling.

PL = Permeable Lens

TABLE 2
GROUNDWATER ELEVATION DATA FOR 2007
The Hartford Area Hydrocarbon Plume Site

1190505040 -- Madison County -- ILR 000128249
 The Hartford Working Group / Hartford, Illinois

WELL	STRATUM SCREENED	DATE	(A) Top of Casing Elevation (ft)	(B) Depth to Hydrocarbon (ft)	(C) Depth to Water (ft)	(A)-(B) Hydrocarbon Surface Elevation (ft)	(A)-(C) Water Surface Elevation (ft)	(C)-(B) Hydrocarbon Thickness (ft)	Do (ft)	Piezometric Surface Elevation ² (ft)
IEPA-4	Main Sand	01/09/07	430.35	34.10	34.94	396.25	395.41	0.84	0.06	396.06
HB-07	Main Sand	--	432.32	PLUGGED	PLUGGED	PLUGGED	PLUGGED	PLUGGED	--	PLUGGED
HB-16	Main Sand	01/10/07	431.42	35.10	36.40	396.32	395.02	1.30	0.13	396.02
HB-27	Main Sand	--	425.83	PLUGGED	PLUGGED	PLUGGED	PLUGGED	PLUGGED	--	PLUGGED
HB-30	Main Sand	01/09/07	431.08	34.80	NA	396.28	NA	0.25	0.02	NA
HB-31	Main Sand	01/10/07	431.49	36.50	36.54	394.99	394.95	0.04	0.01	394.98
HB-32	Main Sand	01/09/07	433.45	NA	37.60	NA	395.85	0.00	0.00	395.85
HB-33	Rand/C Clay/EPA/D Clay/ Main Sand	01/10/07	430.23	NA	32.44	NA	397.79	0.00	0.00	397.79
HB-37	Main Sand	01/10/07	431.77	35.64	35.86	396.13	395.91	0.22	0.02	396.08
HB-38	Main Sand	01/09/07	429.92	NA	33.24	NA	396.68	0.00	0.00	396.68
HMW-01	Rand	01/09/07	429.94	NA	22.64	NA	407.30	0.00	0.00	407.30
HMW-02	Main Sand	01/09/07	429.65	33.91	35.23	395.74	394.42	1.32	0.13	395.44
HMW-03	EPA	01/09/07	428.72	NA	30.87	NA	397.85	0.00	0.00	397.85
HMW-04	Rand	01/09/07	428.96	15.97	15.99	412.99	412.97	0.02	0.01	412.99
HMW-07	Rand	01/09/07	429.12	NA	25.24	NA	403.88	0.00	0.00	403.88
HMW-08	Main Sand	01/09/07	429.74	33.66	34.77	396.08	394.97	1.11	0.07	395.82

TABLE 2
GROUNDWATER ELEVATION DATA FOR 2007
The Hartford Area Hydrocarbon Plume Site

1190505040 -- Madison County -- ILR 000128249
 The Hartford Working Group / Hartford, Illinois

WELL	STRATUM SCREENED	DATE	(A) Top of Casing Elevation (ft)	(B) Depth to Hydrocarbon (ft)	(C) Depth to Water (ft)	(A)-(B) Hydrocarbon Surface Elevation (ft)	(A)-(C) Water Surface Elevation (ft)	(C)-(B) Hydrocarbon Thickness (ft)	D ¹ (ft)	Piezometric Surface Elevation (ft)
HMW-09	N. Olive/ B Clay/ Rand	01/09/07	430.23	NA	23.16	NA	407.07	0.00	0.00	407.07
HMW-10	Main Sand	01/09/07	430.20	34.03	35.46	396.17	394.74	1.43	0.16	395.84
HMW-13	N. Olive	01/09/07	430.81	NA	18.77	NA	412.04	0.00	0.00	412.04
HMW-14	Rand/ C Clay/ Main Sand	01/10/07	430.86	34.36	35.70	396.50	395.16	1.34	0.13	396.19
HMW-18	Main Sand	01/10/07	431.58	35.15	36.29	396.43	395.29	1.14	0.07	396.17
HMW-19	Main Sand	01/10/07	431.80	35.11	36.22	396.69	395.58	1.11	0.07	396.43
HMW-20	Rand/ C Clay/ Main Sand	01/09/07	430.65	34.55	35.31	396.10	395.34	0.76	0.06	395.93
HMW-21	N. Olive/ B Clay/ Rand	01/09/07	430.05	NA	24.26	NA	405.79	0.00	0.00	405.79
HMW-22	Main Sand	01/10/07	430.15	33.88	35.23	396.27	394.92	1.35	0.13	395.96
HMW-25	Main Sand	01/10/07	427.45	NA	29.84	NA	397.61	0.00	0.00	397.61
HMW-26	Main Sand	01/10/07	425.20	NA	28.00	NA	397.20	0.00	0.00	397.20
HMW-27 (T 7/13/04-4/19/05)	Main Sand	01/09/07	430.51	NA	34.40	NA	396.11	0.00	0.00	396.11
HMW-28	Main Sand	01/09/07	430.97	NA	33.38	NA	397.59	0.00	0.00	397.59
HMW-29	Main Sand	01/09/07	429.99	NA	32.55	NA	397.44	0.00	0.00	397.44
HMW-30	Rand/ C Clay/ Main Sand	01/09/07	430.07	34.07	34.87	396.00	395.20	0.80	0.05	395.82
HMW-31	Rand/ C Clay/ Main Sand	01/09/07	430.09	34.08	34.95	396.01	395.14	0.87	0.06	395.81
HMW-32	Rand/ C Clay/ Main Sand	01/09/07	430.01	34.03	34.63	395.98	395.38	0.60	0.04	395.84

TABLE 2
GROUNDWATER ELEVATION DATA FOR 2007
The Hartford Area Hydrocarbon Plume Site

1190505040 -- Madison County -- ILR 000128249
 The Hartford Working Group / Hartford, Illinois

WELL	STRATUM SCREENED	DATE	(A) Top of Casing Elevation (ft)	(B) Depth to Hydrocarbon (ft)	(C) Depth to Water (ft)	(A)-(B) Hydrocarbon Surface Elevation (ft)	(A)-(C) Water Surface Elevation (ft)	(C)-(B) Hydrocarbon Thickness (ft)	Do. (ft)	Piezometric Surface Elevation (ft)
HMW-33	Rand/ C Clay/ Main Sand	01/09/07	430.13	34.05	35.16	396.08	394.97	1.11	0.05	395.82
HMW-34	Rand/ C Clay/ Main Sand	01/09/07	429.83	33.60	35.02	396.23	394.81	1.42	0.16	395.90
HMW-35	Rand/ C Clay/ Main Sand	01/09/07	429.81	33.59	34.99	396.22	394.82	1.40	0.16	395.90
HMW-36	Rand/ C Clay/ Main Sand	01/09/07	429.91	33.70	34.91	396.21	395.00	1.21	0.10	395.93
HMW-37	Rand/ C Clay/ Main Sand	01/09/07	429.61	33.42	34.67	396.19	394.94	1.25	0.13	395.90
HMW-38 A	N. Olive	01/10/07	430.06	NA	DRY	NA	--	0.00	0.00	--
HMW-38 B (T 1/10/05-1/11/05)	B/C Clay (PL in B/C Clay)	01/10/07	429.93	NA	25.13	NA	404.80	0.00	0.00	404.80
HMW-38 C (T 11/19/04)	Main Sand	01/10/07	430.23	NA	34.41	NA	395.82	0.00	0.00	395.82
HMW-39 A	Main Silt (Rand Horizon)	01/10/07	426.46	NA	20.35	NA	406.11	0.00	0.00	406.11
HMW-39 B (T 1/12/05)	Main Silt (Rand Horizon)	01/10/07	426.55	NA	23.35	NA	403.20	0.00	0.00	403.20
HMW-39 C (T 1/11/05-4/20/05)	Main Sand	01/10/07	426.28	NA	30.04	NA	396.24	0.00	0.00	396.24
HMW-40 A	A Clay	01/10/07	425.01	NA	12.96	NA	412.05	0.00	0.00	412.05
HMW-40 B	Main Sand	01/10/07	424.86	NA	24.37	NA	400.49	0.00	0.00	400.49
HMW-40 C (T 4/21/05)	Main Sand	01/10/07	425.01	NA	28.62	NA	396.39	0.00	0.00	396.39
HMW-41 A	Main Silt (Rand Horizon)	01/10/07	425.42	NA	17.80	NA	407.62	0.00	0.00	407.62
HMW-41 B	Main Silt (Rand Horizon)	01/10/07	425.62	NA	28.81	NA	396.81	0.00	0.00	396.81
HMW-41 C	Main Sand	01/10/07	425.85	NA	29.04	NA	396.81	0.00	0.00	396.81
HMW-42 A	Main Silt (Rand Horizon)	01/09/07	431.39	NA	26.02	NA	405.37	0.00	0.00	405.37

Hartford / Reports / rz / Jan. 07 /

Table 2 & 3 Summary of 2007 Quarterly GW Elevs (through January 2007).xls /
 3/23/2007 / KDC/JMO

TABLE 2
GROUNDWATER ELEVATION DATA FOR 2007
The Hartford Area Hydrocarbon Plume Site

1190505040 -- Madison County -- ILR 000128249
 The Hartford Working Group / Hartford, Illinois

WELL	STRATUM SCREENED	DATE	(A) Top of Casing Elevation (ft)	(B) Depth to Hydrocarbon (ft)	(C) Depth to Water (ft)	(A)-(B) Hydrocarbon Surface Elevation (ft)	(A)-(C) Water Surface Elevation (ft)	(C)-(B) Hydrocarbon Thickness (ft)	Do ¹ (ft)	Piezometric Surface Elevation ² (ft)
HMW-42 B	Main Sand	01/09/07	431.46	NA	34.49	NA	396.97	0.00	0.00	396.97
HMW-43 A	N. Olive	01/09/07	428.73	NA	17.41	NA	411.32	0.00	0.00	411.32
HMW-43 B (T 1/11/05-1/11/05)	B/C Clay (PL in B/C Clay)	01/09/07	428.63	NA	22.10	NA	406.53	0.00	0.00	406.53
HMW-43 C (T 1/11/05)	Main Sand	01/09/07	428.96	NA	32.79	NA	396.17	0.00	0.00	396.17
HMW-44 A	N. Olive	01/09/07	429.47	NA	16.12	NA	413.35	0.00	0.00	413.35
HMW-44 B	Rand	01/09/07	429.41	NA	23.41	NA	406.00	0.00	0.00	406.00
HMW-44 C	Main Sand	01/09/07	428.38	32.16	33.97	396.22	394.41	1.81	0.25	395.80
HMW-44 D (T 11/11/05)	Main Sand	01/09/07	429.76	NA	33.98	NA	395.78	0.00	0.00	395.78
HMW-45 A	N. Olive	01/10/07	431.17	NA	17.51	NA	413.66	0.00	0.00	413.66
HMW-45 B	Rand	01/10/07	431.22	NA	28.00	NA	403.22	0.00	0.00	403.22
HMW-45 C	Main Sand	01/10/07	430.87	34.81	35.30	396.06	395.57	0.49	0.03	395.95
HMW-46 A	N. Olive	01/10/07	430.51	NA	18.54	NA	411.97	0.00	0.00	411.97
HMW-46 B	B/C Clay (PL in B/C Clay)	01/10/07	430.61	NA	24.80	NA	405.81	0.00	0.00	405.81
HMW-46 C	Main Sand	01/10/07	430.49	34.60	34.67	395.89	395.82	0.07	0.01	395.87
HMW-47 A	N. Olive	01/10/07	430.50	NA	19.29	NA	411.21	0.00	0.00	411.21
HMW-47 B	B/C Clay (PL in B/C Clay)	01/10/07	430.13	NA	20.55	NA	409.58	0.00	0.00	409.58

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WELL	STRATUM SCREENED	DATE	(A) Top of Casing Elevation (ft)	(B) Depth to Hydrocarbon (ft)	(C) Depth to Water (ft)	(A)-(B) Hydrocarbon Surface Elevation (ft)	(A)-(C) Water Surface Elevation (ft)	(C)-(B) Hydrocarbon Thickness (ft)	Do (ft)	Piezometric Surface Elevation ² (ft)
HMW-47 C	Main Sand	01/10/07	430.61	34.84	35.01	395.77	395.60	0.17	0.01	395.73
HMW-48 A	N. Olive	01/09/07	429.16	NA	DRY	NA	--	0.00	0.00	--
HMW-48 B	Rand	01/09/07	429.18	NA	16.21	NA	412.97	0.00	0.00	412.97
HMW-48 C	EPA	01/09/07	429.02	31.50	31.83	397.52	397.19	0.33	0.02	397.44
HMW-48 D	Main Sand (below D Clay)	01/09/07	428.98	NA	33.29	NA	395.69	0.00	0.00	395.69
HMW-49 A	N. Olive	01/10/07	430.21	NA	12.83	NA	417.38	0.00	0.00	417.38
HMW-49 B	B/C Clay (PL in B/C Clay)	01/10/07	430.23	NA	23.13	NA	407.10	0.00	0.00	407.10
HMW-49 C (T 1/19/05)	EPA	01/10/07	430.18	NA	32.59	NA	397.59	0.00	0.00	397.59
HMW-49 D (T 1/19/05)	Main Sand (below D Clay)	01/10/07	430.25	NA	34.48	NA	395.77	0.00	0.00	395.77
HMW-50 A (T 1/11/05)	Rand	01/09/07	434.43	NA	19.12	NA	415.31	0.00	0.00	415.31
HMW-50 B (T 1/7/05)	EPA	01/09/07	434.43	NA	35.15	NA	399.28	0.00	0.00	399.28
HMW-50 C (T 1/7/05)	Main Sand (below D Clay)	01/09/07	434.28	NA	38.68	NA	395.60	0.00	0.00	395.60
HMW-51 A	N. Olive	01/10/07	425.46	NA	DRY	NA	--	0.00	0.00	--
HMW-51 B	Main Sand	01/10/07	425.51	NA	24.79	NA	400.72	0.00	0.00	400.72
HMW-51 C	Main Sand	01/10/07	425.42	NA	28.79	NA	396.63	0.00	0.00	396.63
HMW-52 A	Main Silt (N. Olive Horizon)	01/09/07	427.80	NA	20.24	NA	407.56	0.00	0.00	407.56
HMW-52 B	Main Silt (Rand Horizon)	01/09/07	427.81	NA	26.70	NA	401.11	0.00	0.00	401.11

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WELL	STRATUM SCREENED	DATE	(A) Top of Casing Elevation (ft)	(B) Depth to Hydrocarbon (ft)	(C) Depth to Water (ft)	(A)-(B) Hydrocarbon Surface Elevation (ft)	(A)-(C) Water Surface Elevation (ft)	(C)-(B) Hydrocarbon Thickness (ft)	Do (ft)	Piezometric Surface Elevation (ft)
HMW-52 C	Main Sand	01/09/07	427.83	NA	31.38	NA	396.45	0.00	0.00	396.45
HMW-53 A	N. Olive	01/09/07	429.73	NA	15.72	NA	414.01	0.00	0.00	414.01
HMW-53 B	Main Silt (Rand Horizon)/ Main Sand	01/09/07	429.76	33.39	34.60	396.37	395.16	1.21	0.10	396.09
HMW-53C	Main Sand	01/09/07	429.66	NA	33.62	NA	396.04	0.00	0.00	396.04
HMW-54 A	N. Olive	01/09/07	429.54	NA	DRY	NA	--	0.00	0.00	--
HMW-54 B	Main Sand	01/09/07	429.55	33.27	34.66	396.28	394.89	1.39	0.13	395.96
HMW-54 C	Main Sand	01/09/07	429.56	NA	33.62	NA	395.94	0.00	0.00	395.94
HP-01A (T 10/7/05)	Main Sand	01/09/07	425.84	NA	26.90	NA	398.94	0.00	0.00	398.94
HP-01B	Main Sand (Deep Nest Well)	01/09/07	425.77	NA	26.81	NA	398.96	0.00	0.00	398.96
HP-01C	Main Sand (Deep Nest Well)	01/09/07	425.84	NA	26.89	NA	398.95	0.00	0.00	398.95
HP-02	Main Sand	01/09/07	429.92	NA	31.02	NA	398.90	0.00	0.00	398.90
HP-03A (T 10/7/05)	Main Sand	01/09/07	429.28	NA	30.55	NA	398.73	0.00	0.00	398.73
HP-03B	Main Sand (Deep Nest Well)	01/09/07	429.24	NA	30.56	NA	398.68	0.00	0.00	398.68
HP-03C	Main Sand (Deep Nest Well)	01/09/07	429.10	NA	30.39	NA	398.71	0.00	0.00	398.71
HP-04A	Main Sand	01/09/07	430.94	NA	33.04	NA	397.90	0.00	0.00	397.90
HP-04B	Main Sand (Deep Nest Well)	01/09/07	430.94	NA	33.00	NA	397.94	0.00	0.00	397.94

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HP-04C	Main Sand (Deep Nest Well)	01/09/07	430.96	NA	33.04	NA	397.92	0.00	0.00	397.92
HP-05A	Main Sand	01/09/07	424.42	NA	25.52	NA	398.90	0.00	0.00	398.90
HP-05B	Main Sand (Deep Nest Well)	01/09/07	424.58	NA	25.97	NA	398.61	0.00	0.00	398.61
HP-05C	Main Sand (Deep Nest Well)	01/09/07	424.43	NA	25.85	NA	398.58	0.00	0.00	398.58
HP-06	Main Sand	01/09/07	425.88	NA	26.84	NA	399.04	0.00	0.00	399.04
HP-07	Main Sand	01/09/07	429.04	NA	29.78	NA	399.26	0.00	0.00	399.26
HP-08	Main Sand	01/09/07	429.81	NA	31.03	NA	398.78	0.00	0.00	398.78
HP-09	Main Sand	01/09/07	431.45	NA	32.76	NA	398.69	0.00	0.00	398.69
MP-5S	A Clay	01/09/07	429.83	NA	DRY	NA	--	0.00	0.00	--
MP-5D	Rand	01/09/07	430.02	NA	24.29	NA	405.73	0.00	0.00	405.73
MP-6S	A Clay	01/09/07	430.15	--	--	--	--	--	--	--
MP-6D	Rand	01/09/07	430.13	--	--	--	--	--	--	--
MP-7S	A Clay	01/09/07	430.17	--	--	--	--	--	--	--
MP-7D	Rand	01/09/07	430.16	--	--	--	--	--	--	--
MP-8S	A. Clay	01/09/07	430.20	NA	7.10	NA	423.10	0.00	0.00	423.10
MP-8D	Rand	01/09/07	430.14	NA	25.04	NA	405.10	0.00	0.00	405.10
MP-9S	A Clay	01/09/07	430.05	NA	8.99	NA	421.06	0.00	0.00	421.06

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MP-9D	Rand	01/09/07	430.00	NA	23.78	NA	406.22	0.00	0.00	406.22
MP-10S	A Clay (PL in A Clay)	01/10/07	430.53	NA	DRY	NA	--	0.00	0.00	--
MP-10D	B/C Clay/ Main Silt (Rand Horizon)	01/10/07	430.37	NA	20.20	NA	410.17	0.00	0.00	410.17
MP-11S	A Clay (PL in A Clay)	01/10/07	431.19	NA	DRY	NA	--	0.00	0.00	--
MP-11D	B/C Clay/ Main Silt (Rand Horizon)	01/10/07	431.19	NA	20.79	NA	410.40	0.00	0.00	410.40
MP-12S	A Clay (PL in A Clay)	01/10/07	431.70	NA	DRY	NA	--	0.00	0.00	--
MP-12D	B Clay/ Rand/ C Clay	01/10/07	431.63	NA	20.82	NA	410.81	0.00	0.00	410.81
MP-13S	A Clay	01/09/07	429.20	NA	DRY	NA	--	0.00	0.00	--
MP-13D	Main Silt (Rand Horizon)	01/09/07	429.30	NA	DRY	NA	--	0.00	0.00	--
MP-14S	A Clay	01/09/07	429.51	NA	DRY	NA	--	0.00	0.00	--
MP-14D	Main Silt (Rand Horizon)	01/09/07	429.51	NA	26.82	NA	402.69	0.00	0.00	402.69
MP-15S	A Clay	01/09/07	429.63	NA	DRY	NA	--	0.00	0.00	--
MP-15D	Main Silt (Rand Horizon)	01/09/07	429.58	NA	26.77	NA	402.81	0.00	0.00	402.81
MP-16S	A Clay	01/09/07	429.75	NA	DRY	NA	--	0.00	0.00	--
MP-16D	Main Silt (Rand Horizon)	01/09/07	429.77	NA	27.60	NA	402.17	0.00	0.00	402.17
MP-25	N. Olive/ B Clay/ Rand	01/09/07	429.71	NA	28.18	NA	401.53	0.00	0.00	401.53
MP-26	N. Olive/ B Clay/ Rand	01/09/07	429.54	NA	DRY	NA	--	0.00	0.00	--

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MP-27	N. Olive/ B Clay/ Rand	01/09/07	429.55	NA	28.69	NA	400.86	0.00	0.00	400.86
MP-28	Rand	01/09/07	429.80	NA	25.02	NA	404.78	0.00	0.00	404.78
MP-29 A	N. Olive	01/09/07	429.39	NA	DRY	NA	--	0.00	0.00	--
MP-29 B	Rand	01/09/07	429.43	NA	DRY	NA	--	0.00	0.00	--
MP-29 C	Rand	01/09/07	429.49	24.63	24.64	404.86	404.85	0.01	0.01	404.86
MP-29 D	Main Sand	01/09/07	429.47	33.40	34.73	396.07	394.74	1.33	0.11	395.76
MP-30 A	N. Olive	01/10/07	431.20	NA	18.46	NA	412.74	0.00	0.00	412.74
MP-30 B	Rand	01/10/07	431.21	NA	29.37	NA	401.84	0.00	0.00	401.84
MP-30 C	Main Sand	01/10/07	431.13	34.76	35.83	396.37	395.30	1.07	0.07	396.12
MP-31 A	A Clay	01/10/07	426.71	NA	DRY	NA	--	0.00	0.00	--
MP-31 B	N. Olive	01/10/07	426.79	NA	15.78	NA	411.01	0.00	0.00	411.01
MP-31 C	Main Sand	01/10/07	426.98	NA	30.80	NA	396.18	0.00	0.00	396.18
MP-32 A	N. Olive	01/10/07	429.68	NA	DRY	NA	--	0.00	0.00	--
MP-32 B	Main Sand	01/10/07	429.68	NA	DRY	NA	--	0.00	0.00	--
MP-32 C	Main Sand	01/10/07	429.72	NA	33.60	NA	396.12	0.00	0.00	396.12
MP-33 A	A Clay	01/10/07	430.05	--	--	--	--	--	--	--
MP-33 B	N. Olive	01/10/07	430.09	--	--	--	--	--	--	--

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MP-33 C	Rand	01/10/07	430.09	--	--	--	--	--	--	--
MP-33 D	Main Sand	01/10/07	430.09	--	--	--	--	--	--	--
MP-34 A	N. Olive	01/10/07	430.97							ENSR Transducer Present
MP-34 B	Rand	01/10/07	430.70							ENSR Transducer Present
MP-34 C	Main Sand	01/10/07	430.88							ENSR Transducer Present
MP-35 A	A Clay	01/10/07	430.36	NA	DRY	NA	--	0.00	0.00	--
MP-35 B	N. Olive	01/10/07	430.41	NA	DRY	NA	--	0.00	0.00	--
MP-35 C	Rand	01/10/07	430.44	NA	DRY	NA	--	0.00	0.00	--
MP-35 D	Main Sand	01/10/07	430.43	34.18	35.53	396.25	394.90	1.35	0.16	395.94
MP-36 A	N. Olive	01/10/07	431.91	--	--	--	--	--	--	--
MP-36 B	Rand	01/10/07	431.94	NA	26.37	NA	405.57	0.00	0.00	--
MP-36 C	Main Sand	01/10/07	431.99	35.70	36.84	396.29	395.15	1.14	0.07	396.03
MP-37 A	N. Olive	01/09/07	429.01	NA	DRY	NA	--	0.00	0.00	--
MP-37 B	Rand	01/09/07	428.99	NA	DRY	NA	--	0.00	0.00	--
MP-37 C	C Clay (PL in Clay)	01/09/07	429.07	25.53	25.54	403.54	403.53	0.01	0.01	403.54
MP-37 D	Main Sand	01/09/07	429.04	32.09	34.37	396.95	394.67	2.28	0.44	396.43
MP-38 A	N. Olive	01/10/07	427.17	NA	DRY	NA	--	0.00	0.00	--

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MP-38 B	Main Silt (Rand Horizon)	01/10/07	427.03	NA	DRY	NA	--	0.00	0.00	--
MP-38 C	Main Sand	01/10/07	426.91	29.96	32.43	396.95	394.48	2.47	0.50	396.38
MP-39 A	N. Olive	01/10/07	432.09	NA	12.80	NA	419.29	0.00	0.00	419.29
MP-39 B	Rand	01/10/07	432.07	NA	21.32	NA	410.75	0.00	0.00	410.75
MP-39 C	Main Sand	01/10/07	432.07	35.47	37.10	396.60	394.97	1.63	0.22	396.23
MP-40 A	A Clay (PL in A Clay)	01/10/07	431.02	NA	DRY	NA	--	0.00	0.00	--
MP-40 B	Main Silt (Rand Horizon)	01/10/07	431.04	NA	DRY	NA	--	0.00	0.00	--
MP-40 C	Main Sand	01/10/07	431.04	34.41	35.87	396.63	395.17	1.46	0.19	396.29
MP-41 A	N. Olive	01/09/07	431.24	NA	DRY	NA	--	0.00	0.00	--
MP-41 B	Rand	01/09/07	431.23	NA	25.80	NA	405.43	0.00	0.00	405.43
MP-41 C	Main Sand	01/09/07	431.08	34.76	35.86	396.32	395.22	1.10	0.07	396.07
MP-42 A	N. Olive	01/09/07	430.21	NA	DRY	NA	--	0.00	0.00	--
MP-42 B	Rand	01/09/07	430.20	NA	DRY	NA	--	0.00	0.00	--
MP-42 C	Main Sand	01/10/07	430.32	34.11	35.44	396.21	394.88	1.33	0.13	395.90
MP-43 A	N. Olive	01/10/07	426.75	NA	DRY	NA	--	0.00	0.00	--
MP-43 B	Main Silt (Rand Horizon)	01/10/07	426.72	NA	DRY	NA	--	0.00	0.00	--
MP-43 C	Main Silt (Rand Horizon)/ Main Sand	01/10/07	426.39	NA	29.92	NA	396.47	0.00	0.00	396.47

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MP-44 A	A Clay	01/09/07	430.64	NA	DRY	NA	--	0.00	0.00	--
MP-44 B	N. Olive	01/09/07	430.54	NA	DRY	NA	--	0.00	0.00	--
MP-44 C	Rand	01/09/07	430.54	NA	DRY	NA	--	0.00	0.00	--
MP-44 D	Main Sand	01/09/07	430.62	34.27	35.65	396.35	394.97	1.38	0.16	396.03
MP-45 A	N. Olive	01/09/07	430.04	NA	12.75	NA	417.29	0.00	0.00	417.29
MP-45 B	Rand	01/09/07	430.04	NA	DRY	NA	--	0.00	0.00	--
MP-45 C	Main Sand	01/09/07	429.93	33.59	35.25	396.34	394.68	1.66	0.25	395.96
MP-46 A	N. Olive	01/09/07	429.67	NA	DRY	NA	--	0.00	0.00	--
MP-46 B	Rand	01/09/07	429.65	NA	24.15	NA	405.50	0.00	0.00	405.50
MP-46 C	Main Sand	01/09/07	429.60	33.28	34.91	396.32	394.69	1.63	0.22	395.95
MP-47 A	N. Olive	01/09/07	429.12	NA	DRY	--	--	0.00	0.00	--
MP-47 B	Rand	01/09/07	429.05	NA	22.34	NA	406.71	0.00	0.00	406.71
MP-47 C	Main Sand	01/09/07	429.01	32.72	34.41	396.29	394.60	1.69	0.22	395.90
MP-48 A	N. Olive	01/10/07	428.92							
MP-48 B	Main Silt (Rand Horizon)	01/10/07	429.04							
MP-48 C	Main Sand	01/10/07	429.41							
MP-49 A	A Clay (PL in A Clay)	01/10/07	431.07	NA	DRY	NA	-	0.00	0.00	-

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MP-49 B	Rand	01/10/07	431.08	NA	23.18	NA	407.90	0.00	0.00	407.90
MP-49 C	Main Sand	01/10/07	431.07	34.33	35.83	396.74	395.24	1.50	0.19	396.40
MP-50 A	A Clay	01/09/07	430.31			ENSR Transducer Present				
MP-50 B	Rand	01/09/07	430.29			ENSR Transducer Present				
MP-50 C	Main Sand	01/09/07	429.98			ENSR Transducer Present				
MP-51 A	A Clay (PL in A Clay)	01/09/07	430.90	NA	DRY	NA	--	0.00	0.00	--
MP-51 B	N. Olive	01/09/07	430.91	NA	DRY	NA	--	0.00	0.00	--
MP-51 C	Rand	01/09/07	430.93	NA	DRY	--	--	0.00	0.00	--
MP-51 D	Main Sand	01/09/07	430.99	34.61	36.25	396.38	394.74	1.64	0.22	396.00
MP-52 A	A Clay (PL in A Clay)	01/09/07	429.96	NA	DRY	NA	--	0.00	0.00	--
MP-52 B	Rand	01/09/07	429.97	NA	DRY	NA	--	0.00	0.00	--
MP-52 C	Main Sand	01/09/07	429.99	34.57	34.60	395.42	395.39	0.03	0.01	395.41
MP-53 A	A Clay	01/09/07	430.59	NA	11.69	NA	418.90	0.00	0.00	418.90
MP-53 B	Rand	01/09/07	430.60	NA	DRY	--	--	0.00	0.00	--
MP-53 C	Main Sand	01/09/07	430.52	34.33	34.90	396.19	395.62	0.57	0.05	396.06
MP-54 A	N. Olive	01/09/07	430.00	NA	DRY	NA	--	0.00	0.00	--
MP-54 B	Rand	01/09/07	429.99	NA	DRY	--	--	0.00	0.00	--

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MP-54 C	Main Sand	01/09/07	430.07	33.74	35.30	396.33	394.77	1.56	0.22	395.97
MP-55 A	N. Olive/ B Clay	01/09/07	429.65	NA	16.89	NA	412.76	0.00	0.00	412.76
MP-55 B	Rand	01/09/07	429.64	NA	23.89	NA	405.75	0.00	0.00	405.75
MP-55 C	Main Sand	01/10/07	429.67	33.34	34.85	396.33	394.82	1.51	0.17	395.98
MP-56 A	N. Olive	01/09/07	430.25	NA	10.96	NA	419.29	0.00	0.00	419.29
MP-56 B	Rand	01/09/07	430.25	NA	DRY	--	--	0.00	0.00	--
MP-56 C	Main Sand	01/09/07	430.15	NA	33.98	NA	396.17	0.00	0.00	396.17
MP-57 A	N. Olive	01/09/07	429.05	NA	DRY	NA	--	0.00	0.00	--
MP-57 B	Rand	01/09/07	429.04	NA	DRY	NA	--	0.00	0.00	--
MP-57 C	Main Sand	01/09/07	429.15	32.85	33.96	396.30	395.19	1.11	0.07	396.04
MP-58 A	A Clay	01/09/07	430.29	NA	DRY	NA	--	0.00	0.00	--
MP-58 B	Main Silt (Rand Horizon)	01/09/07	430.29	NA	DRY	NA	--	0.00	0.00	--
MP-58 C	Main Sand	01/09/07	430.33	33.88	34.03	396.45	396.30	0.15	0.01	396.42
MP-59 A	A Clay	01/09/07	429.97	NA	DRY	NA	--	0.00	0.00	--
MP-59 B	Main Silt (Rand Horizon)	01/09/07	429.88	NA	DRY	NA	--	0.00	0.00	--
MP-59 C	Main Sand	01/09/07	429.90	33.12	33.41	396.78	396.49	0.29	0.02	396.71
MP-60 A	A Clay (PL in A Clay)	01/09/07	429.21	NA	DRY	NA	--	0.00	0.00	--

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MP-60 B	Main Silt (Rand Horizon)	01/09/07	429.20	NA	DRY	NA	--	0.00	0.00	--
MP-60 C	Main Sand	01/09/07	429.21	32.72	34.13	396.49	395.08	1.41	0.16	396.17
MP-61 A	A Clay (PL in A Clay)	01/09/07	429.98	NA	10.17	NA	419.81	0.00	0.00	419.81
MP-61 B	Main Silt (Rand Horizon)	01/09/07	429.98	NA	DRY	NA	--	0.00	0.00	--
MP-61 C	Main Sand	01/09/07	430.00	NA	33.08	NA	396.92	0.00	0.00	396.92
MP-62 A	A Clay (PL in A Clay)	01/09/07	429.11	NA	8.77	NA	420.34	0.00	0.00	420.34
MP-62 B	Main Silt (N. Olive Horizon)	01/09/07	429.11	NA	DRY	NA	--	0.00	0.00	--
MP-62 C	Main Sand	01/09/07	428.94	NA	32.21	NA	396.73	0.00	0.00	396.73
MP-63 A	A Clay	01/09/07	429.26	NA	DRY	NA	--	0.00	0.00	--
MP-63 B	Main Silt (N. Olive Horizon)	01/10/07	429.26	NA	DRY	NA	--	0.00	0.00	--
MP-63 C	Main Sand	01/09/07	429.29	NA	32.69	NA	396.60	0.00	0.00	396.60
MP-64 A	A Clay (PL in A Clay)	01/09/07	428.73	NA	9.61	NA	419.12	0.00	0.00	419.12
MP-64 B	Main Silt (N. Olive Horizon)	01/09/07	428.74	NA	21.31	NA	407.43	0.00	0.00	407.43
MP-64 C	Main Sand	01/09/07	428.55	31.76	33.26	396.79	395.29	1.50	0.19	396.45
MP-65 A	Main Silt (N. Olive Horizon)	01/09/07	431.41	NA	16.20	NA	415.21	0.00	0.00	415.21
MP-65 B	Main Sand	01/09/07	431.44	NA	DRY	NA	--	0.00	0.00	--
MP-65 C	Main Sand	01/09/07	431.42	NA	33.85	NA	397.57	0.00	0.00	397.57

TABLE 2
GROUNDWATER ELEVATION DATA FOR 2007
The Hartford Area Hydrocarbon Plume Site

1190505040 -- Madison County -- ILR 000128249
 The Hartford Working Group / Hartford, Illinois

WELL	STRATUM SCREENED	DATE	(A) Top of Casing Elevation (ft)	(B) Depth to Hydrocarbon (ft)	(C) Depth to Water (ft)	(A)-(B) Hydrocarbon Surface Elevation (ft)	(A)-(C) Water Surface Elevation (ft)	(C)-(B) Hydrocarbon Thickness (ft)	Do ¹ (ft)	Piezometric Surface Elevation ² (ft)
MP-66 A	Main Silt (N. Olive Horizon)	01/10/07	430.81	NA	14.22	NA	416.59	0.00	0.00	416.59
MP-66 B	Main Silt (Rand Horizon)	01/09/07	430.82	NA	25.16	NA	405.66	0.00	0.00	405.66
MP-66 C	Main Sand	01/09/07	430.79	NA	33.38	NA	397.41	0.00	0.00	397.41
MP-67 A	A Clay (PL in A Clay)	01/09/07	430.29	NA	9.86	NA	420.43	0.00	0.00	420.43
MP-67 B	Main Silt (Rand Horizon)	01/09/07	430.31	NA	25.38	NA	404.93	0.00	0.00	404.93
MP-67 C	Main Sand	01/09/07	430.19	NA	33.30	NA	396.89	0.00	0.00	396.89
MP-68 A	N. Olive	01/10/07	431.36	NA	DRY	NA	--	0.00	0.00	--
MP-69 A	N. Olive	01/10/07	431.57	NA	DRY	NA	--	0.00	0.00	--
MP-70 A	N. Olive	01/10/07	431.00	NA	DRY	NA	--	0.00	0.00	--
MP-71 A	N. Olive	01/10/07	430.14	NA	DRY	NA	--	0.00	0.00	--
MP-72 A	N. Olive	01/10/07	430.51	NA	DRY	NA	--	0.00	0.00	--
MP-73 A	N. Olive	01/10/07	430.84	NA	DRY	NA	--	0.00	0.00	--
MP-74 A	N. Olive	01/10/07	431.38	NA	DRY	NA	--	0.00	0.00	--
MP-75 A	N. Olive	01/10/07	430.66	NA	DRY	NA	--	0.00	0.00	--
MP-76 A	N. Olive	01/10/07	430.75	NA	DRY	NA	--	0.00	0.00	--
MP-77A	A Clay	01/09/07	430.53	NA	DRY	NA	--	0.00	0.00	--
MP-77B	Main Silt (Rand Horizon)	01/09/07	430.62	NA	24.58	NA	406.04	0.00	0.00	406.04

TABLE 2
GROUNDWATER ELEVATION DATA FOR 2007
The Hartford Area Hydrocarbon Plume Site

1190505040 -- Madison County -- ILR 000128249
 The Hartford Working Group / Hartford, Illinois

WELL	STRATUM SCREENED	DATE	(A) Top of Casing Elevation (ft)	(B) Depth to Hydrocarbon (ft)	(C) Depth to Water (ft)	(A)-(B) Hydrocarbon Surface Elevation (ft)	(A)-(C) Water Surface Elevation (ft)	(C)-(B) Hydrocarbon Thickness (ft)	Do ¹	Piezometric Surface Elevation ² (ft)
MP-77C	Main Sand	01/09/07	430.46	33.89	34.95	396.57	395.51	1.06	0.07	396.33
MP-78 A	A Clay	01/10/07	430.38	NA	DRY	NA	--	0.00	0.00	--
MP-78 B	N. Olive	01/10/07	430.23	NA	DRY	NA	--	0.00	0.00	--
MP-78 C	Rand	01/10/07	430.29	NA	24.08	NA	406.21	0.00	0.00	406.21
MP-78 D	Main Sand	01/10/07	430.17	NA	34.23	NA	395.94	0.00	0.00	395.94
MP-79 A	N. Olive	01/10/07	429.44	NA	DRY	NA	--	0.00	0.00	--
MP-79 B	Rand	01/10/07	429.48	NA	DRY	NA	--	0.00	0.00	--
MP-79 C	Main Sand	01/11/07	429.52	32.27	36.58	397.25	392.94	4.31	1.07	396.26
MP-79 D	Main Sand	01/10/07	429.46	NA	33.42	NA	396.04	0.00	0.00	396.04
MP-80 A	N. Olive	01/10/07	430.03	NA	18.85	NA	411.18	0.00	0.00	411.18
MP-80 B	Rand	01/10/07	430.10	NA	27.56	NA	402.54	0.00	0.00	402.54
MP-80 C	Main Sand	01/10/07	430.03	33.61	35.14	396.42	394.89	1.53	0.19	396.07
MP-81 A	A Clay (PL in A Clay)	01/10/07	425.57	NA	DRY	NA	--	0.00	0.00	--
MP-81 B	Main Silt (Rand Horizon)	01/10/07	425.53	NA	DRY	NA	--	0.00	0.00	--
MP-81 C	Main Sand	01/10/07	425.40	NA	28.58	NA	396.82	0.00	0.00	396.82
MP-82 A	A Clay (PL in A Clay)	01/10/07	431.67	--	--	--	--	--	--	--
MP-82 B	Main Silt (Rand Horizon)	01/10/07	431.58	--	--	--	--	--	--	--

TABLE 2
GROUNDWATER ELEVATION DATA FOR 2007
The Hartford Area Hydrocarbon Plume Site

1190505040 -- Madison County -- ILR 000128249
 The Hartford Working Group / Hartford, Illinois

WELL	STRATUM SCREENED	DATE	(A) Top of Casing Elevation (ft)	(B) Depth to Hydrocarbon (ft)	(C) Depth to Water (ft)	(A)-(B) Hydrocarbon Surface Elevation (ft)	(A)-(C) Water Surface Elevation (ft)	(C)-(B) Hydrocarbon Thickness (ft)	Do (ft)	Piezometric Surface Elevation ² (ft)
MP-82 C	Main Sand	01/10/07	431.61	NA	34.88	NA	396.73	0.00	0.00	396.73
MP-83 A	N. Olive	01/10/07	426.92	NA	DRY	NA	--	0.00	0.00	--
MP-83 B	Rand	01/10/07	426.94	NA	DRY	NA	--	0.00	0.00	--
MP-83 C	Main Sand	01/10/07	426.79	NA	30.66	NA	396.13	0.00	0.00	396.13
MP-84 A	A Clay (PL in A Clay)	01/10/07	432.08	NA	DRY	NA	--	0.00	0.00	--
MP-84 B	Main Silt (Rand Horizon)	01/10/07	432.07	NA	25.45	NA	406.62	0.00	0.00	406.62
MP-84 C	Main Silt (Rand Horizon)/ Main Sand	01/10/07	432.10	35.27	36.99	396.83	395.11	1.72	0.25	396.43
MP-85 A	N. Olive	01/09/07	428.07	NA	10.16	NA	417.91	0.00	0.00	417.91
MP-85 B	Rand	01/09/07	428.06	NA	17.31	NA	410.75	0.00	0.00	410.75
MP-85 C	EPA	01/09/07	428.08	32.10	32.26	395.98	395.82	0.16	0.01	395.94
MP-85 D	Main Sand (below D Clay)	01/09/07	427.86	NA	32.09	NA	395.77	0.00	0.00	395.77
MP-86 A	A Clay (PL in A Clay)	01/10/07	431.31	NA	DRY	NA	--	0.00	0.00	--
MP-86 B	Main Silt (Rand Horizon)	01/10/07	431.28	NA	25.53	NA	405.75	0.00	0.00	405.75
MP-86 C	Main Sand	01/10/07	431.20	34.48	34.62	396.72	396.58	0.14	0.01	396.69
MP-87 A	A Clay (PL in A Clay)	01/10/07	432.01	--	--	--	--	--	--	--
MP-87 B	Main Silt (Rand Horizon)	01/10/07	432.01	--	--	--	--	--	--	--
MP-87 C	Main Sand	01/10/07	432.08	--	--	--	--	--	--	--

TABLE 2
GROUNDWATER ELEVATION DATA FOR 2007
The Hartford Area Hydrocarbon Plume Site

1190505040 -- Madison County -- ILR 000128249
 The Hartford Working Group / Hartford, Illinois

WELL	STRATUM SCREENED	DATE	(A) Top of Casing (ft)	(B) Depth to Hydrocarbon (ft)	(C) Depth to Water (ft)	(A)-(B) Hydrocarbon Surface Elevation (ft)	(A)-(C) Water Surface Elevation (ft)	(C)-(B) Hydrocarbon Thickness (ft)	Do (ft)	Piezometric Surface Elevation (ft)
MP-88 A	A Clay	01/09/07	430.60	NA	DRY	NA	--	0.00	0.00	--
MP-88 B	Main Silt (Rand Horizon)	01/09/07	430.60	NA	DRY	NA	--	0.00	0.00	--
MP-88 C	Main Sand	01/09/07	430.51	33.76	34.02	396.75	396.49	0.26	0.02	396.69
MP-89 A	A Clay	01/09/07	429.17	NA	9.72	NA	419.45	0.00	0.00	419.45
MP-89 B	Main Silt (Rand Horizon)	01/09/07	429.17	NA	DRY	NA	--	0.00	0.00	--
MP-89 C	Main Sand	01/09/07	429.25	NA	32.45	NA	396.80	0.00	0.00	396.80
MP-90 B	Main Silt (N. Olive Horizon)	--	430.18	NA						Well Abandoned in 2006
MP-90 BR	Main Silt (N. Olive Horizon)	01/10/07	429.95	NA	DRY	NA	--	0.00	0.00	--
MP-90 C	Main Silt (Rand Horizon)/ Main Sand	01/10/07	429.95	33.18	34.13	396.77	395.82	0.95	0.08	396.55
MP-91 B	Main Silt (N. Olive Horizon)	01/10/07	425.98	NA	DRY	NA	--	0.00	0.00	--
MP-91 C	Main Silt	01/10/07	425.98	NA	DRY	NA	--	0.00	0.00	--
MP-91 D	Main Sand	01/10/07	425.96	NA	29.51	NA	396.45	0.00	0.00	396.45
MP-92 C	N. Olive	01/10/07	427.71	NA	19.88	NA	407.83	0.00	0.00	407.83
MP-92 D	Main Silt (Rand Horizon)/ Main Sand	01/10/07	427.98	NA	31.15	NA	396.83	0.00	0.00	396.83
MP-93A	Fill/A Clay	01/10/07	429.74	NA	DRY	NA	--	0.00	0.00	--
MP-93B	A Clay	01/10/07	429.84	NA	DRY	NA	--	0.00	0.00	--

TABLE 2
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WELL	STRATUM SCREENED	DATE	(A) Top of Casing Elevation (ft)	(B) Depth to Hydrocarbon (ft)	(C) Depth to Water (ft)	(A)-(B) Hydrocarbon Surface Elevation (ft)	(A)-(C) Water Surface Elevation (ft)	(C)-(B) Hydrocarbon Thickness (ft)	Do. (ft)	Piezometric Surface Elevation ² (ft)
MP-94A	A Clay	01/09/07	428.63	NA	8.53	NA	420.10	0.00	0.00	420.10
MP-94B	Main Silt	01/09/07	428.72	NA	17.79	NA	410.93	0.00	0.00	410.93
MP-95A	A Clay	01/09/07	428.60	NA	DRY	NA	--	0.00	0.00	--
MP-95B	Main Silt	01/09/07	428.67	NA	16.69	NA	411.98	0.00	0.00	411.98
MP-96A	A Clay	01/09/07	429.42	NA	5.08	NA	424.34	0.00	0.00	424.34
MP-96B	N. Olive	01/09/07	429.57	NA	DRY	NA	--	0.00	0.00	--
MP-96C	Rand	01/09/07	429.38	NA	23.57	NA	405.81	0.00	0.00	405.81
MP-96D	Main Sand	01/09/07	429.48	33.26	34.38	396.22	395.10	1.12	0.07	395.96
MP-97A	A Clay	01/09/07	429.33	NA	DRY	NA	--	0.00	0.00	--
MP-97B	N. Olive	01/09/07	429.31	NA	15.58	NA	413.73	0.00	0.00	413.73
MP-97C	Rand	01/09/07	429.30	NA	DRY	NA	--	0.00	0.00	--
MP-97D	Main Sand	01/09/07	429.31	33.09	34.73	396.22	394.58	1.64	0.22	395.84
MP-98A	A Clay	01/09/07	429.40	NA	DRY	NA	--	0.00	0.00	--
MP-98B	N. Olive	01/09/07	429.38	NA	DRY	NA	--	0.00	0.00	--
MP-98C	Rand	01/09/07	429.38	NA	DRY	NA	--	0.00	0.00	--
MP-99A	A Clay	01/10/07	431.59	NA	6.88	NA	424.71	0.00	0.00	424.71
MP-99B	Main Silt	01/10/07	431.58	NA	13.28	NA	418.30	0.00	0.00	418.30

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WELL	STRATUM SCREENED	DATE	(A) Top of Casing Elevation (ft)	(B) Depth to Hydrocarbon (ft)	(C) Depth to Water (ft)	(A)-(B) Hydrocarbon Surface Elevation (ft)	(A)-(C) Water Surface Elevation (ft)	(C)-(B) Hydrocarbon Thickness (ft)	Do (ft)	Piezometric Surface Elevation ² (ft)
MP-99C	Main Sand	01/10/07	431.56	NA	34.61	NA	396.95	0.00	0.00	396.95
MP-100A	Fill	01/10/07	431.55	NA	DRY	NA	--	0.00	0.00	--
MP-100B	A Clay	01/10/07	431.62	NA	DRY	NA	--	0.00	0.00	--
MP-100C	Main Silt	01/10/07	431.67	NA	13.21	NA	418.46	0.00	0.00	418.46
MP-100D	Main Sand	01/10/07	431.65	NA	34.43	NA	397.22	0.00	0.00	397.22
MP-101A	A Clay	01/10/07	431.29	--	--	--	--	--	--	--
MP-101B	Main Silt	01/10/07	431.30	--	--	--	--	--	--	--
MP-101C	Main Sand	01/10/07	431.31	--	--	--	--	--	--	--
MP-102A	A Clay	01/10/07	431.14	--	--	--	--	--	--	--
MP-102B	Main Silt	01/10/07	431.13	--	--	--	--	--	--	--
MP-102C	Main Sand	01/10/07	431.13	--	--	--	--	--	--	--
MP-103A	A Clay	01/10/07	431.23	NA	DRY	NA	--	0.00	0.00	--
MP-103B	Main Silt	01/10/07	431.25	NA	14.53	NA	416.72	0.00	0.00	416.72
MP-103C	Main Sand	01/10/07	431.24	NA	34.52	NA	396.72	0.00	0.00	396.72
MP-104A	A Clay	01/10/07	431.26	NA	6.96	NA	424.30	0.00	0.00	424.30
MP-104B	Main Silt	01/10/07	431.29	NA	14.35	NA	416.94	0.00	0.00	416.94
MP-104C	Main Sand	01/10/07	431.25	NA	34.51	NA	396.74	0.00	0.00	396.74

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WELL	STRATUM SCREENED	DATE	(A) Top of Casing Elevation (ft)	(B) Depth to Hydrocarbon (ft)	(C) Depth to Water (ft)	(A)-(B) Hydrocarbon Surface Elevation (ft)	(A)-(C) Water Surface Elevation (ft)	(C)-(B) Hydrocarbon Thickness (ft)	Do. (ft)	Piezometric Surface Elevation (ft)
MP-105A	A Clay / N. Olive	01/09/07	430.95	NA	DRY	NA	--	0.00	0.00	--
MP-105B	A Clay / N. Olive	01/09/07	431.36	NA	DRY	NA	--	0.00	0.00	--
MP-105C	A Clay / N. Olive	01/09/07	431.35	NA	DRY	NA	--	0.00	0.00	--
MP-105D	A Clay / N. Olive	01/09/07	431.43	NA	9.23	NA	422.20	0.00	0.00	422.20
MP-105E	A Clay / N. Olive	01/09/07	431.46	NA	DRY	NA	--	0.00	0.00	--
MP-106A	A Clay	01/09/07	429.49	NA	DRY	NA	--	0.00	0.00	--
MP-106B	N. Olive	01/09/07	429.48	NA	DRY	NA	--	0.00	0.00	--
MP-106C	Rand	01/09/07	429.49	NA	22.70	NA	406.79	0.00	0.00	406.79
MP-107A	A Clay	01/09/07	429.76	NA	4.89	NA	424.87	0.00	0.00	424.87
MP-107B	N. Olive	01/09/07	429.80	NA	DRY	NA	--	0.00	0.00	--
MP-107C	Rand	01/09/07	429.74	NA	DRY	NA	--	0.00	0.00	--
MP-108A	A Clay	01/09/07	429.57	NA	DRY	NA	--	0.00	0.00	--
MP-108B	N. Olive	01/09/07	429.62	NA	DRY	NA	--	0.00	0.00	--
MP-108C	Rand	01/09/07	429.60	NA	21.72	NA	407.88	0.00	0.00	407.88
RW-1	Main Sand	01/10/07	433.78	37.08	37.48	396.70	396.30	0.40	0.03	396.61
RW-2	Main Sand	01/10/07	431.99	35.85	36.62	396.14	395.37	0.77	0.06	395.96
RW-3	Main / potentially other hydrostratigraphic unit	01/10/07	433.35	37.27	37.98	396.08	395.37	0.71	0.05	395.92

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RW-4	Rand/ C Clay/ Main Sand	01/09/07	429.65	NA	33.64	NA	396.01	0.00	0.00	396.01
RW-4 A*	Rand/ C Clay/ Main Sand	01/09/07	429.86				Skimmer Pump in Well			
RW-5	Rand/ C Clay/ Main Sand	01/09/07	430.22	33.98	35.27	396.24	394.95	1.29	0.13	395.94
River Elevation at River Dock	NA	01/09/07					402.74			

NOTES:

NA = Not Applicable

-- = No data

PL = Permeable Lense

SG = Specific gravity of hydrocarbon determined to be an average of 0.77 for data recorded during and after 09/03.

(T xx/xx/xxxx) = Date transducer installed in well, however, data may be from miniTROLL or manual gauging.

1 = D_o is a normalized volume of LNAPL (ft^3/ft^2) per unit surface area, but is expressed as a thickness (in units of feet).

2 = Piezometric surface elevation = $[(A)-(C)] + S.G.[(C)-(B)]$

MP-5 through 28 installed as vacuum monitoring probes by Clayton in 7/03 and are not appropriate for determining groundwater flow.

HMW-25 through HMW-29 installed by Clayton in 12/03.

HMW-30 through 37, RW-4 and RMW-4A installed as pilot test wells by Clayton in 2004 and are not appropriate for determining groundwater flow.

Remaining HMW-series and MP-series installed by Clayton during 2004 through 2006.

Remaining wells installed by others.

TOC elevations surveyed to USGS datum by CMT.

Top of casing elevation changes present in the table indicate that the associated wells have been re-surveyed.

TABLE 3
GROUNDWATER ELEVATION DATA FOR 2007
Wells (Shell Sites) Outside of Hartford, Illinois

1190505040 -- Madison County -- ILR 000128249
 The Hartford Working Group / Hartford, Illinois

WELL	DATE	(A) Top of Casing Elevation (ft)	(B) Depth to Hydrocarbon (ft)	(C) Depth to Water (ft)	(A)-(B) Hydrocarbon Surface Elevation (ft)	(A)-(C) Water Surface Elevation (ft)	(C)-(B) Hydrocarbon Thickness (ft)	Piezometric Surface Elevation (ft)
P-47	--	428.20	--	--	--	--	--	--
P-51	--	426.62	--	--	--	--	--	--
P-76	01/09/07	433.28	Abandoned by Shell in 12/2005					
P-77	01/09/07	434.71	NA	39.03	NA	395.68	0.00	395.68
P-78	01/09/07	433.33	NA	37.70	NA	395.63	0.00	395.63
P-79	01/09/07	432.72	NA	37.04	NA	395.68	0.00	395.68
P-80	01/09/07	433.10	NA	37.54	NA	395.56	0.00	395.56
P-81	01/09/07	433.26	37.28	39.01	395.98	394.25	1.73	395.53
P-104	01/09/07	432.74	NA	24.55	NA	408.19	0.00	408.19
P-105	01/09/07	432.59	NA	36.53	NA	396.06	0.00	396.06
P-106	01/09/07	432.70	NA	36.99	NA	395.71	0.00	395.71
P-107	01/09/07	431.92	NA	33.10	NA	398.82	0.00	398.82
P-129	01/09/07	433.23	--	--	--	--	--	--
P-130	01/09/07	431.59	--	--	--	--	--	--
P-131	01/09/07	432.65	NA	21.10	NA	411.55	0.00	411.55

Hartford / Reports / rz / Jan. 07 /

Table 2 & 3 Summary of 2007 Quarterly GW Elevs (through January 2007).xls /
 3/23/2007 / KDC/JMO

TABLE 3
GROUNDWATER ELEVATION DATA FOR 2007
Wells (Shell Sites) Outside of Hartford, Illinois

1190505040 -- Madison County -- ILR 000128249
The Hartford Working Group / Hartford, Illinois

WELL	DATE	(A) Top of Casing Elevation (ft)	(B) Depth to Hydrocarbon (ft)	(C) Depth to Water (ft)	(A)-(B) Hydrocarbon Surface Elevation (ft)	(A)-(C) Water Surface Elevation (ft)	(C)-(B) Hydrocarbon Thickness (ft)	Piezometric Surface Elevation ¹ (ft)
P-132	01/09/07	432.12	NA	32.79	NA	399.33	0.00	399.33
P-133	01/09/07	431.06	NA	17.12	NA	413.94	0.00	413.94
P-134	01/09/07	432.55	NA	19.92	NA	412.63	0.00	412.63
SP-1	01/09/07	429.01	NA	11.54	NA	417.47	0.00	417.47
SP-2B	01/09/07	429.11	NA	29.48	NA	399.63	0.00	399.63
SP-3	01/09/07	431.64	NA	13.21	NA	418.43	0.00	418.43
SP-5	01/09/07	431.15	NA	13.46	NA	417.69	0.00	417.69
SP-6	01/09/07	433.08	NA	13.78	NA	419.30	0.00	419.30
SP-7	01/09/07	429.03	NA	11.44	NA	417.59	0.00	417.59
SP-8	01/09/07	429.03	NA	11.44	NA	417.59	0.00	417.59
SP-9	01/09/07	432.65	NA	14.34	NA	418.31	0.00	418.31
SP-10	01/09/07	432.61	NA	14.07	NA	418.54	0.00	418.54
SP-11	01/09/07	432.40	NA	13.21	NA	419.19	0.00	419.19
SP-12	01/09/07	432.35			Abandoned by Shell in 12/2005			
SP-13	01/09/07	432.48			Abandoned by Shell in 12/2005			

TABLE 3
GROUNDWATER ELEVATION DATA FOR 2007
Wells (Shell Sites) Outside of Hartford, Illinois

1190505040 -- Madison County -- ILR 000128249
 The Hartford Working Group / Hartford, Illinois

WELL	DATE	(A) Top of Casing Elevation (ft)	(B) Depth to Hydrocarbon (ft)	(C) Depth to Water (ft)	(A)-(B) Hydrocarbon Surface Elevation (ft)	(A)-(C) Water Surface Elevation (ft)	(C)-(B) Hydrocarbon Thickness (ft)	Piezometric Surface Elevation (ft)
SP-14	01/09/07	428.92				Abandoned by Shell in 2006		
SP-15	01/09/07	428.89	NA	11.71	NA	417.18	0.00	417.18
SP-16	01/09/07	429.43	NA	11.98	NA	417.45	0.00	417.45
SP-17	01/09/07	428.19			Abandoned by Shell in 2006			
SP-18	01/09/07	431.07			Abandoned by Shell in 2006			
SP-19	01/09/07	430.87	NA	15.17	NA	415.70	0.00	415.70
SP-20	01/09/07	431.16	NA	13.76	NA	417.40	0.00	417.40
SP-21	01/09/07	431.68	NA	16.15	NA	415.53	0.00	415.53
SP-22	01/09/07	430.35	NA	12.49	NA	417.86	0.00	417.86
SP-23	01/09/07	430.70	NA	13.16	NA	417.54	0.00	417.54
SP-24	01/09/07	428.89	NA	11.28	NA	417.61	0.00	417.61
SP-25	01/09/07	428.61	11.07	11.11	417.54	417.50	0.04	417.53
SP-26	01/09/07	429.88	NA	12.38	NA	417.50	0.00	417.50
SP-27	01/09/07	431.93	NA	14.58	NA	417.35	0.00	417.35
SP-28	01/09/07	432.21	NA	13.81	NA	418.40	0.00	418.40

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TABLE 3
GROUNDWATER ELEVATION DATA FOR 2007
Wells (Shell Sites) Outside of Hartford, Illinois

1190505040 -- Madison County -- ILR 000128249
 The Hartford Working Group / Hartford, Illinois

WELL	DATE	(A) Top of Casing Elevation (ft)	(B) Depth to Hydrocarbon (ft)	(C) Depth to Water (ft)	(A)-(B) Hydrocarbon Surface Elevation (ft)	(A)-(C) Water Surface Elevation (ft)	(C)-(B) Hydrocarbon Thickness (ft)	Piezometric Surface Elevation (ft)
SP-29	01/09/07	431.81	NA	14.18	NA	417.63	0.00	417.63
SP-30	01/09/07	431.87	15.45	15.51	416.42	416.36	0.06	416.40
SP-31	01/09/07	429.77	NA	12.84	NA	416.93	0.00	416.93
SP-32	01/09/07	430.49	NA	13.35	NA	417.14	0.00	417.14
SP-33	01/09/07	430.99	NA	13.74	NA	417.25	0.00	417.25
SP-34	01/09/07	430.17	NA	13.54	NA	416.63	0.00	416.63
SP-35	01/09/07	431.13	NA	13.59	NA	417.54	0.00	417.54
SP-36	01/09/07	429.50	NA	34.10	NA	395.40	0.00	395.40
SP-37	01/09/07	429.71	NA	29.66	NA	400.05	0.00	400.05
SP-38	01/09/07	430.90	NA	22.39	NA	408.51	0.00	408.51
SP-39	01/09/07	431.98	NA	15.57	NA	416.41	0.00	416.41
SP-40	01/09/07	431.84	NA	31.77	NA	400.07	0.00	400.07
SP-41	01/09/07	431.52	NA	36.20	NA	395.32	0.00	395.32
SP-42	01/09/07	431.73	NA	36.19	NA	395.54	0.00	395.54
SP-43	01/09/07	431.75	NA	29.12	NA	402.63	0.00	402.63

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TABLE 3
GROUNDWATER ELEVATION DATA FOR 2007
Wells (Shell Sites) Outside of Hartford, Illinois

1190505040 -- Madison County -- ILR 000128249
 The Hartford Working Group / Hartford, Illinois

WELL	DATE	(A) Top of Casing Elevation (ft)	(B) Depth to Hydrocarbon (ft)	(C) Depth to Water (ft)	(A)-(B) Hydrocarbon Surface Elevation (ft)	(A)-(C) Water Surface Elevation (ft)	(C)-(B) Hydrocarbon Thickness (ft)	Piezometric Surface Elevation (ft)
SP-44	01/09/07	431.87	NA	18.10	NA	413.77	0.00	413.77
SP-45	01/09/07	434.16	NA	34.56	NA	399.60	0.00	399.60
SP-46	01/09/07	434.06	NA	38.56	NA	395.50	0.00	395.50
SP-47	01/09/07	432.96	NA	33.41	NA	399.55	0.00	399.55
SP-48	01/09/07	432.31	NA	33.71	NA	398.60	0.00	398.60
SP-49	01/09/07	428.85	NA	30.06	NA	398.79	0.00	398.79
SP-50	01/09/07	432.47	NA	33.12	NA	399.35	0.00	399.35
SP-51	01/09/07	432.49	NA	37.09	NA	395.40	0.00	395.40
SP-52	01/09/07	428.99	NA	13.92	NA	415.07	0.00	415.07
SP-53	01/09/07	428.92	NA	24.39	NA	404.53	0.00	404.53
SP-54	01/09/07	428.90	NA	33.43	NA	395.47	0.00	395.47
SP-55	01/09/07	432.31	NA	14.13	NA	418.18	0.00	418.18
SP-56	01/09/07	432.21	NA	32.33	NA	399.88	0.00	399.88
SP-57	01/09/07	432.15	NA	36.61	NA	395.54	0.00	395.54
SP-58	01/09/07	431.93	NA	32.72	NA	399.21	0.00	399.21

TABLE 3
GROUNDWATER ELEVATION DATA FOR 2007
Wells (Shell Sites) Outside of Hartford, Illinois

1190505040 -- Madison County -- ILR 000128249
 The Hartford Working Group / Hartford, Illinois

WELL	DATE	(A) Top of Casing Elevation (ft)	(B) Depth to Hydrocarbon (ft)	(C) Depth to Water (ft)	(A)-(B) Hydrocarbon Surface Elevation (ft)	(A)-(C) Water Surface Elevation (ft)	(C)-(B) Hydrocarbon Thickness (ft)	Piezometric Surface Elevation (ft)
SP-59	01/09/07	431.94	NA	36.70	NA	395.24	0.00	395.24
SP-60	01/09/07	432.05	NA	36.76	NA	395.29	0.00	395.29
TP-PZ-1 (E)	01/09/07	437.36	NA	38.08	NA	399.28	0.00	399.28
TP-PZ-2-(E)	01/09/07	434.43	NA	34.95	NA	399.48	0.00	399.48

NOTES:

NA = Not Applicable

-- = No data

SG = Specific gravity of hydrocarbon assumed to be 0.74 by others.

¹ Piezometric surface elevation = [(A)-(C)]+S.G.[(C)-(B)]

Well SP-4 no longer exists.

TOC elevations (except for SP-42, SP-43, & SP-44) have been rotated and adjusted to match USGS datum (datum used to survey Village wells). This rotation and adjustment of original survey data (obtained in 7/01 by CMT, Inc.) was completed in 1/04 by CMT. TOC elevations for SP-42, SP-43, and SP-44 were surveyed to USGS datum in 12/03 by CMT.

Top of casing elevation changes present in the table indicate that the associated wells have been re-surveyed.

TABLE 4
GROUNDWATER ELEVATION DATA FOR 2007
Wells Located in Premcor Facility

1190500002 -- Madison County -- ILD041889023
 The Premcor Refining Group Inc. / Hartford, Illinois

WELL	Stratum Screened	DATE	(A) Top of Casing Elevation (ft)	(B) Depth to Hydrocarbon (ft)	(C) Depth to Water (ft)	(A)-(B) Hydrocarbon Surface Elevation (ft)	(A)-(C) Water Surface Elevation (ft)	(C)-(B) Hydrocarbon Thickness (ft)	Piezometric Surface Elevation ¹ (ft)
DS-1	Main Sand (Shallow)	01/09/07	430.94	34.18	34.30	396.76	396.64	0.12	396.73
DS-2	Main Sand (Shallow)	01/09/07	431.13	34.19	34.43	396.94	396.70	0.24	396.89
DS-3	Main Sand (Shallow)	01/09/07	430.49	33.58	34.18	396.91	396.31	0.60	396.78
DS-4	Main Sand (Shallow)	01/09/07	431.26	34.68	34.78	396.58	396.48	0.10	396.56
GB-1	Main Sand (Shallow)	01/09/07	431.59	NA	32.05	NA	399.54	0.00	399.54
GB-6	Main Sand (Shallow)	01/09/07	430.53	NA	32.63	NA	397.90	0.00	397.90
LP-4	Main Sand (Shallow)	01/09/07	432.55	NA	34.87	NA	397.68	0.00	397.68
MP-1S	N. Olive	01/09/07	431.37	--	--	--	--	--	--
MP-1D	EPA	01/09/07	431.04	--	--	--	--	--	--
MP-2S	N. Olive	01/09/07	430.66	NA	26.85	NA	403.81	0.00	403.81
MP-2D	EPA	01/09/07	430.27	NA	DRY	NA	--	0.00	--
MP-3S	N. Olive	01/09/07	430.59	--	--	--	--	--	--
MP-3D	EPA	01/09/07	430.51	--	--	--	--	--	--
MP-4S	N. Olive	01/09/07	430.42	NA	25.51	NA	404.91	0.00	404.91
MP-4D	EPA	01/09/07	430.42	NA	DRY	NA	--	0.00	--

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TABLE 4
GROUNDWATER ELEVATION DATA FOR 2007
Wells Located in Premcor Facility

1190500002 -- Madison County -- ILD041889023
 The Premcor Refining Group Inc. / Hartford, Illinois

WELL	Stratum Screened	DATE	(A) Top of Casing Elevation (ft)	(B) Depth to Hydrocarbon (ft)	(C) Depth to Water (ft)	(A)-(B) Hydrocarbon Surface Elevation (ft)	(A)-(C) Water Surface Elevation (ft)	(C)-(B) Hydrocarbon Thickness (ft)	Piezometric Surface Elevation (ft)
MW-1	Main Sand (Shallow)	01/09/07	420.39	NA	18.18	NA	402.21	0.00	402.21
MW-2	Main Sand (Shallow)	01/09/07	419.10	NA	17.61	NA	401.49	0.00	401.49
MW-3	Main Sand (Shallow)	01/09/07	421.37	NA	20.10	NA	401.27	0.00	401.27
MW-4	Main Sand (Shallow)	01/09/07	421.38	NA	20.40	NA	400.98	0.00	400.98
P-6 N (T 2/27/05)	Main Sand (Basal)	01/09/07	430.29	NA	34.94	NA	395.35	0.00	395.35
P-6 S	Main Sand (Basal)	01/09/07	430.28	NA	34.95	NA	395.33	0.00	395.33
P-6 E	Main Sand (Basal)	01/09/07	429.73	34.06	35.76	395.67	393.97	1.70	395.30
Product Pipeline Sump	NA	01/09/07	--	NA	12.90	--	--	0.00	--
RB-01	Main Sand (Shallow)	01/09/07	430.28	NA	DRY	NA	--	0.00	--
RB-08P Skimmer Well	EPA / Main	01/09/07	433.41	34.66	37.49	398.75	395.92	2.83	398.13
RB-08 2" piezometer	EPA / Main	01/09/07	--	23.79	NA	--	--	5.77	--
RB-10	EPA / Main	01/09/07	430.16	32.70	39.23	397.46	390.93	6.53	396.02
RB-13	EPA / Main	01/09/07	430.79	NA	33.84	NA	396.95	0.00	396.95
RB-22	Main Sand (Shallow)	01/10/07	431.06	NA	32.85	NA	398.21	0.00	398.21
RB-25	EPA / Main	01/09/07	432.10	NA	35.93	NA	396.17	0.00	396.17

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TABLE 4
GROUNDWATER ELEVATION DATA FOR 2007
Wells Located in Premcor Facility

1190500002 -- Madison County -- ILD041889023
 The Premcor Refining Group Inc. / Hartford, Illinois

WELL	Stratum Screened	DATE	(A) Top of Casing Elevation (ft)	(B) Depth to Hydrocarbon (ft)	(C) Depth to Water (ft)	(A)-(B) Hydrocarbon Surface Elevation (ft)	(A)-(C) Water Surface Elevation (ft)	(C)-(B) Hydrocarbon Thickness (ft)	Piezometric Surface Elevation (ft)
RB-26	EPA / Main	01/09/07	430.05	NA	34.10	NA	395.95	0.00	395.95
RB-29	N. Olive	01/09/07	431.97	14.20	14.51	417.77	417.46	0.31	417.70
RB-30	Main Sand (Shallow)	01/09/07	431.94	NA	35.39	NA	396.55	0.00	396.55
RB-35	EPA / Main	01/09/07	429.49	32.18	35.56	397.31	393.93	3.38	396.57
RB-36	N. Olive	01/09/07	429.21	NA	22.03	NA	407.18	0.00	407.18
RB-37	Main Sand (Shallow)	01/09/07	428.52			Skimmer Pump in Well			
RB-38	Main Sand (Shallow)	01/09/07	433.73	NA	37.97	NA	395.76	0.00	395.76
RB-39	EPA / Main	01/09/07	431.54	NA	32.97	NA	398.57	0.00	398.57
RB-40	Main Sand (Shallow)	01/09/07	433.51	NA	37.48	NA	396.03	0.00	396.03
RB-41	Main Sand (Shallow)	01/09/07	433.25	NA	37.23	NA	396.02	0.00	396.02
RB-42	Main Sand (Shallow)	01/09/07	428.47	NA	32.83	NA	395.64	0.00	395.64
RB-43	Main Sand (Shallow)	01/09/07	427.99	NA	26.41	NA	401.58	0.00	401.58
RB-44	Main Sand (Shallow)	01/09/07	432.99	NA	34.05	NA	398.94	0.00	398.94
RB-45	Main Sand (Shallow)	01/09/07	431.95	NA	33.54	NA	398.41	0.00	398.41
RB-46	Main Sand (Shallow)	01/10/07	430.61	NA	33.35	NA	397.26	0.00	397.26

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TABLE 4
GROUNDWATER ELEVATION DATA FOR 2007
Wells Located in Premcor Facility

1190500002 -- Madison County -- ILD041889023
 The Premcor Refining Group Inc. / Hartford, Illinois

WELL	Stratum Screened	DATE	(A) Top of Casing Elevation (ft)	(B) Depth to Hydrocarbon (ft)	(C) Depth to Water (ft)	(A)-(B) Hydrocarbon Surface Elevation (ft)	(A)-(C) Water Surface Elevation (ft)	(C)-(B) Hydrocarbon Thickness (ft)	Piezometric Surface Elevation (ft)
RB-47	Main Sand (Shallow)	01/10/07	431.05	NA	34.13	NA	396.92	0.00	396.92
RB-48	Main Sand (Shallow)	01/10/07	431.36			Skimmer Pump in Well			
RB-49	A Clay	01/10/07	429.32	NA	3.28	NA	426.04	0.00	426.04
RB-50	A Clay	01/10/07	431.47	NA	5.29	NA	426.18	0.00	426.18
RB-51	Main Sand (Shallow)	01/10/07	431.54	NA	32.94	NA	398.60	0.00	398.60
RB-52	Main Sand (Shallow)	01/09/07	431.97			Skimmer Pump in Well			
RB-53 Barotroll	EPA / Main	01/09/07	433.31			Skimmer Pump in Well			
RB-54	EPA	01/09/07	431.79	NA	24.20	NA	407.59	0.00	407.59
RB-55	EPA	01/09/07	433.82			Skimmer Pump in Well			
RB-56	EPA / Main	01/09/07	431.89			Skimmer Pump in Well			
RMP-5A	A Clay		431.08	--	--	--	--	--	--
RMP-5B	N. Olive	01/09/07	430.96	NA	18.00	NA	412.96	0.00	412.96
RMP-5C	EPA	01/09/07	431.24	NA	36.41	NA	394.83	0.00	394.83
RMP-5D	Main Sand (below D Clay)	01/09/07	431.41	NA	36.51	NA	394.90	0.00	394.90
RMP-6A	A Clay		430.08	--	--	--	--	--	--

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TABLE 4
GROUNDWATER ELEVATION DATA FOR 2007
Wells Located in Premcor Facility

1190500002 -- Madison County -- ILD041889023
The Premcor Refining Group Inc. / Hartford, Illinois

WELL	Stratum Screened	DATE	(A) Top of Casing Elevation (ft)	(B) Depth to Hydrocarbon (ft)	(C) Depth to Water (ft)	(A)-(B) Hydrocarbon Surface Elevation (ft)	(A)-(C) Water Surface Elevation (ft)	(C)-(B) Hydrocarbon Thickness (ft)	Piezometric Surface Elevation ¹ (ft)
RMP-6B	N. Olive	01/09/07	429.97	NA	DRY	NA	--	0.00	--
RMP-6C	EPA	01/09/07	429.88	NA	34.08	NA	395.80	0.00	395.80
RMP-6D	Main Sand (below D Clay)	01/09/07	430.26	NA	34.84	NA	395.42	0.00	395.42
RMP-7A	A Clay		430.50	--	--	--	--	--	--
RMP-7B	N. Olive	01/09/07	430.58	NA	DRY	NA	--	0.00	--
RMP-7C	EPA	01/09/07	430.49	34.75	36.83	395.74	393.66	2.08	395.28
RMP-7D	Main Sand (below D Clay)	01/09/07	430.56	NA	35.24	NA	395.32	0.00	395.32
RMP-8A	A Clay		433.44	--	--	--	--	--	--
RMP-8B	N. Olive	01/09/07	433.42	NA	DRY	NA	--	0.00	--
RMP-8C	EPA	01/09/07	433.37	NA	37.00	NA	396.37	0.00	396.37
RMP-8D	Main Sand (below D Clay)	01/09/07	433.33	NA	37.74	NA	395.59	0.00	395.59
RMP-9A	A Clay		434.15	--	--	--	--	--	--
RMP-9B	N. Olive	01/09/07	433.95	NA	20.87	NA	413.08	0.00	413.08
RMP-9C	Main Sand (Shallow)	01/09/07 ***	435.93				H2A Present		
RMP-10A	A Clay		430.70	--	--	--	--	--	--

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TABLE 4
GROUNDWATER ELEVATION DATA FOR 2007
Wells Located in Premcor Facility

1190500002 -- Madison County -- ILD041889023
 The Premcor Refining Group Inc. / Hartford, Illinois

WELL	Stratum Screened	DATE	(A) Top of Casing Elevation (ft)	(B) Depth to Hydrocarbon (ft)	(C) Depth to Water (ft)	(A)-(B) Hydrocarbon Surface Elevation (ft)	(A)-(C) Water Surface Elevation (ft)	(C)-(B) Hydrocarbon Thickness (ft)	Piezometric Surface Elevation ¹ (ft)
RMP-10B	N. Olive	01/09/07	430.70	NA	DRY	NA	--	0.00	--
RMP-10C	Main Sand (Shallow)	01/09/07	430.74	34.51	36.31	396.23	394.43	1.80	395.83
RMP-11A	A Clay		429.73	--	--	--	--	--	--
RMP-11B	N. Olive	01/09/07	429.81	NA	DRY	NA	--	0.00	--
RMP-11C	Main Sand (Shallow)	1/9/07 ***	432.30	36.19	38.23	396.11	394.07	2.04	395.66
RMP-12A	A Clay		430.47	--	--	--	--	--	--
RMP-12B	N. Olive	01/09/07	430.45	NA	17.01	NA	413.44	0.00	413.44
RMP-12C	Main Silt		430.26	--	--	--	--	--	--
RMP-12D	Main Sand	01/09/07	430.35	NA	34.25	NA	396.10	0.00	396.10
RMP-13A	A Clay		431.28	--	--	--	--	--	--
RMP-13B	Main Silt		431.30	--	--	--	--	--	--
RMP-13C	Main Silt	01/09/07	431.32	NA	33.78	NA	397.54	0.00	397.54
RMP-14A	A Clay		430.30	--	--	--	--	--	--
RMP-14B	Main Silt		430.30	--	--	--	--	--	--
RMP-14C	Main Sand (Shallow)	01/09/07	430.64	33.35	39.23	397.29	391.41	5.88	396.00

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TABLE 4
GROUNDWATER ELEVATION DATA FOR 2007
Wells Located in Premcor Facility

1190500002 -- Madison County -- ILD041889023
 The Premcor Refining Group Inc. / Hartford, Illinois

WELL	Stratum Screened	DATE	(A) Top of Casing Elevation (ft)	(B) Depth to Hydrocarbon (ft)	(C) Depth to Water (ft)	(A)-(B) Hydrocarbon Surface Elevation (ft)	(A)-(C) Water Surface Elevation (ft)	(C)-(B) Hydrocarbon Thickness (ft)	Piezometric Surface Elevation (ft)
RMP-15A	A Clay		433.63	--	--	--	--	--	--
RMP-15B	N. Olive	01/09/07	433.77	NA	20.78	NA	412.99	0.00	412.99
RMP-16A	A Clay		433.97	--	--	--	--	--	--
RMP-16B	EPA	01/09/07	434.13	NA	38.86	NA	395.27	0.00	395.27
RMP-17A	Main Sand (Shallow)	01/09/07	434.20	38.30	39.91	395.90	394.29	1.61	395.55
RMP-18A	Main Sand (Shallow)	01/09/07	430.07	33.88	35.53	396.19	394.54	1.65	395.83
RMP-19A	Main Sand (Shallow)	01/09/07	430.41	34.08	35.68	396.33	394.73	1.60	395.98
RMW-1A	A Clay	01/09/07	429.78	NA	10.09	NA	419.69	0.00	419.69
RMW-1B	Main Silt	01/09/07	429.72	26.11	26.20	403.61	403.52	0.09	403.59
RMW-1C	Main Sand (Shallow)	01/09/07	429.48	32.90	33.19	396.58	396.29	0.29	396.52
RMW-1D	Main Sand (Intermediate)	01/09/07	429.66	NA	33.16	NA	396.50	0.00	396.50
RMW-1E	Main Sand (Deep)	01/09/07	429.63	NA	33.21	NA	396.42	0.00	396.42
RMW-1F	Main Sand (Basal)	01/09/07	429.43	NA	33.00	NA	396.43	0.00	396.43
RMW-2A	N. Olive	01/09/07	433.64	NA	21.89	NA	411.75	0.00	411.75
RMW-2B	B/C Clay (Permeable Lens)	01/09/07	433.64	NA	26.84	NA	406.80	0.00	406.80

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Wells Located in Premcor Facility

1190500002 -- Madison County -- ILD041889023
 The Premcor Refining Group Inc. / Hartford, Illinois

WELL	Stratum Screened	DATE	(A) Top of Casing Elevation (ft)	(B) Depth to Hydrocarbon (ft)	(C) Depth to Water (ft)	(A)-(B) Hydrocarbon Surface Elevation (ft)	(A)-(C) Water Surface Elevation (ft)	(C)-(B) Hydrocarbon Thickness (ft)	Piezometric Surface Elevation ¹ (ft)
RMW-2C	Main Sand (Shallow)	01/09/07	433.34	37.05	38.41	396.29	394.93	1.36	395.99
RMW-2D	Main Sand (Intermediate)	01/09/07	433.41	NA	37.21	NA	396.20	0.00	396.20
RMW-2E	Main Sand (Deep)	01/09/07	433.54	NA	37.34	NA	396.20	0.00	396.20
RMW-2F	Main Sand (Basal)	01/09/07	433.64	NA	37.53	NA	396.11	0.00	396.11
RMW-3A	N. Olive	01/09/07	434.10	NA	22.25	NA	411.85	0.00	411.85
RMW-3B (T 2/27/05-7/18/05)	EPA / Main	01/09/07	434.01	38.52	39.61	395.49	394.40	1.09	395.25
RMW-3C	Main Sand (below D Clay)	01/09/07	434.21	NA	38.83	NA	395.38	0.00	395.38
RMW-4A	N. Olive	01/09/07	433.02	NA	20.09	NA	412.93	0.00	412.93
RMW-4B	EPA	01/09/07	433.07	NA	35.03	NA	398.04	0.00	398.04
RMW-4C (T 2/27/05)	Main Sand (below D Clay)	01/09/07	433.11	NA	37.53	NA	395.58	0.00	395.58
RMW-4D	Main Sand (Intermediate)	01/09/07	432.83	NA	37.29	NA	395.54	0.00	395.54
RMW-4E	Main Sand (Deep)	01/09/07	432.82	NA	37.26	NA	395.56	0.00	395.56
RMW-4F	Main Sand (Basal)	01/09/07	432.37	NA	36.80	NA	395.57	0.00	395.57
RMW-5A	N. Olive	01/09/07	431.85	NA	21.25	NA	410.60	0.00	410.60
RMW-5B (T 1/7/05)	EPA	01/09/07	431.78	NA	33.22	NA	398.56	0.00	398.56

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RMW-5C (T 1/10/05)	Main Sand (below D Clay)	01/09/07	431.78	NA	36.15	NA	395.63	0.00	395.63
RMW-6A	N. Olive	01/09/07	430.40	NA	17.95	NA	412.45	0.00	412.45
RMW-6B	B/C Clay (Permeable Lens)	01/09/07	430.39	NA	21.12	NA	409.27	0.00	409.27
RMW-6C	Main Silt	01/09/07	430.37	NA	30.52	NA	399.85	0.00	399.85
RMW-6D	Main Sand (Shallow)	01/09/07	430.41	NA	34.35	NA	396.06	0.00	396.06
RMW-6E	Main Sand (Intermediate)	01/09/07	430.02	NA	34.41	NA	395.61	0.00	395.61
RMW-6F	Main Sand (Deep)	01/09/07	429.67	NA	34.05	NA	395.62	0.00	395.62
RMW-6G	Main Sand (Basal)	01/09/07	430.01	NA	34.40	NA	395.61	0.00	395.61
RMW-7A	N. Olive	01/09/07	429.00	NA	19.04	NA	409.96	0.00	409.96
RMW-7B	B/C Clay (Permeable Lens)	01/09/07	429.11	NA	21.45	NA	407.66	0.00	407.66
RMW-7C	Main Sand	01/09/07	429.34			Skimmer Pump in Well			
RMW-7D	Main Sand (Intermediate)	01/09/07	428.62	NA	33.08	NA	395.54	0.00	395.54
RMW-7E	Main Sand (Deep)	01/09/07	428.95	NA	33.42	NA	395.53	0.00	395.53
RMW-7F	Main Sand (Basal)	01/09/07	429.20	NA	33.61	NA	395.59	0.00	395.59
RMW-8A	Main Silt	01/09/07	432.52	NA	33.60	NA	398.92	0.00	398.92

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RMW-8B	Main Sand (Shallow)	01/09/07	432.49	NA	36.73	NA	395.76	0.00	395.76
RMW-8C	Main Sand (Intermediate)	01/09/07	432.32	NA	36.52	NA	395.80	0.00	395.80
RMW-8D	Main Sand (Deep)	01/09/07	432.43	NA	36.62	NA	395.81	0.00	395.81
RMW-8E	Main Sand (Basal)	01/09/07	432.52	NA	36.70	NA	395.82	0.00	395.82
RMW-9A	N. Olive	01/09/07	430.71	NA	11.24	NA	419.47	0.00	419.47
RMW-9B	EPA	01/09/07	430.67	34.58	34.83	396.09	395.84	0.25	396.04
RMW-10A	N. Olive	01/09/07	430.53	14.03	14.35	416.50	416.18	0.32	416.43
RMW-10B	Main Sand (Shallow)	01/09/07	430.42	NA	34.27	NA	396.15	0.00	396.15
RMW-10C	Main Sand (Intermediate)	01/09/07	428.09	NA	31.83	NA	396.26	0.00	396.26
RMW-10D	Main Sand (Deep)	01/09/07	428.00	NA	31.73	NA	396.27	0.00	396.27
RMW-10E	Main Sand (Basal)	01/09/07	427.87	NA	31.56	NA	396.31	0.00	396.31
RMW-11A (T 1/21/05)	N. Olive	01/09/07	429.70	NA	15.46	NA	414.24	0.00	414.24
RMW-11B (T 1/21/05)	B/C Clay (Permeable Lens)	01/09/07	429.88	NA	23.49	NA	406.39	0.00	406.39
RMW-11C (T 1/21/05-8/19/05)	Main Sand (Shallow)	01/09/07	430.27	33.52	35.02	396.75	395.25	1.50	396.42
RMW-12A	N. Olive	01/09/07	432.43	NA	14.70	NA	417.73	0.00	417.73

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RMW-12B	B/C Clay (Permeable Lens)	01/09/07	432.57	NA	30.35	NA	402.22	0.00	402.22
RMW-12C	Main Sand (Shallow)	01/09/07	432.25	NA	35.52	NA	396.73	0.00	396.73
RMW-13A	N. Olive	01/09/07	429.26	NA	10.16	NA	419.10	0.00	419.10
RMW-13B	B/C Clay (Permeable Lens)	01/09/07	429.25	NA	23.35	NA	405.90	0.00	405.90
RMW-13C	Main Sand (Shallow)	01/09/07	429.06	NA	32.50	NA	396.56	0.00	396.56
RMW-14A	N. Olive	01/09/07	433.12	NA	22.15	NA	410.97	0.00	410.97
RMW-14B	B/C Clay (Permeable Lens)	01/09/07	433.14	NA	22.28	NA	410.86	0.00	410.86
RMW-14C	Main Sand (below D Clay)	01/09/07	433.10	NA	36.92	NA	396.18	0.00	396.18
RMW-15A	N. Olive	01/09/07	432.96	18.82	18.84	414.14	414.12	0.02	414.14
RMW-15B	B/C Clay	01/09/07	432.96	NA	19.00	NA	413.96	0.00	413.96
RMW-15C	EPA / Main	01/09/07	432.95			Skimmer Pump in Well			
RMW-15D	Main Sand (Intermediate)	01/09/07	432.77	NA	37.32	NA	395.45	0.00	395.45
RMW-15E	Main Sand (Deep)	01/09/07	432.80	NA	37.34	NA	395.46	0.00	395.46
RMW-15F	Main Sand (Basal)	01/09/07	432.36	NA	36.92	NA	395.44	0.00	395.44
RMW-16A	Main Silt	01/10/07	430.07	NA	29.14	NA	400.93	0.00	400.93

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RMW-16B	Main Sand (Shallow)	01/10/07	430.12	NA	33.11	NA	397.01	0.00	397.01
RMW-16C	Main Sand (Intermediate)	01/10/07	430.15	NA	33.31	NA	396.84	0.00	396.84
RMW-16D	Main Sand (Deep)	01/10/07	430.13	NA	33.29	NA	396.84	0.00	396.84
RMW-16E	Main Sand (Basal)	01/10/07	430.12	NA	33.25	NA	396.87	0.00	396.87
RMW-17A	Main Silt	01/10/07	431.80	NA	DRY	NA	--	0.00	--
RMW-17B	Main Sand (Shallow)	01/10/07	431.79	NA	34.43	NA	397.36	0.00	397.36
RMW-17C	Main Sand (Intermediate)	01/10/07	431.51	NA	34.19	NA	397.32	0.00	397.32
RMW-17D	Main Sand (Deep)	01/10/07	431.56	NA	34.18	NA	397.38	0.00	397.38
RMW-17E	Main Sand (Basal)	01/10/07	431.61	NA	34.15	NA	397.46	0.00	397.46
RMW-18A	Main Silt	01/10/07	429.54	NA	25.12	NA	404.42	0.00	404.42
RMW-18B	Main Sand (Shallow)	01/10/07	429.42	NA	32.84	NA	396.58	0.00	396.58
RMW-19A	Main Silt	01/10/07	431.33	NA	32.63	NA	398.70	0.00	398.70
RMW-19B	Main Sand (Shallow)	01/10/07	431.71	NA	33.71	NA	398.00	0.00	398.00
RMW-20A	Main Silt	01/10/07	431.56			Skimmer Pump in Well			
RMW-20B	Main Sand (Shallow)	01/10/07	431.56			Skimmer Pump in Well			

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RMW-21A	Main Silt	01/10/07	432.16	NA	29.85	NA	402.31	0.00	402.31
RMW-21B	Main Sand (Shallow)	01/10/07	432.09	32.89	36.10	399.20	395.99	3.21	398.49
RMW-21C	Main Sand (Intermediate)	01/10/07	429.05	NA	30.65	NA	398.40	0.00	398.40
RMW-21D	Main Sand (Deep)	01/10/07	428.73	NA	30.33	NA	398.40	0.00	398.40
RMW-21E	Main Sand (Basal)	01/10/07	428.30	NA	29.89	NA	398.41	0.00	398.41
RMW-22A	Main Silt	01/10/07	430.84	NA	DRY	NA	--	0.00	--
RMW-22B	Main Sand (Shallow)	01/10/07	430.76	NA	32.25	NA	398.51	0.00	398.51
RMW-23A (T 1/7/05)	Main Sand (Shallow)	01/10/07	430.45	31.03	33.45	399.42	397.00	2.42	398.89
RMW-24A	N. Olive	01/09/07	433.30	NA	22.44	NA	410.86	0.00	410.86
RMW-24B	B/C Clay (Permeable Lens)	01/09/07	433.28	NA	29.06	NA	404.22	0.00	404.22
RMW-24C (T 11/19/04-5/19/05)	EPA / Main	01/09/07	433.28	37.67	37.93	395.61	395.35	0.26	395.55
RMW-24D	Main Sand (below D Clay)	01/09/07	433.43	NA	37.82	NA	395.61	0.00	395.61
RMW-25A (T 2/27/05)	EPA	01/09/07	433.51	NA	37.65	NA	395.86	0.00	395.86
RMW-25B (T 11/19/04)	Main Sand (below D Clay)	01/09/07	433.58	37.94	38.37	395.64	395.21	0.43	395.55
RMW-26A	N. Olive	01/09/07	432.69	NA	DRY	NA	--	0.00	--

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RMW-26B	B/C Clay (Permeable Lens)	01/09/07	433.01	NA	DRY	NA	--	0.00	--
RMW-26C (T 2/27/05)	EPA	01/09/07	432.79	NA	36.72	NA	396.07	0.00	396.07
RMW-26D (T 11/19/04)	Main Sand (below D Clay)	01/09/07	432.43	NA	36.88	NA	395.55	0.00	395.55
RMW-27A	Main Silt	01/09/07	429.81	NA	25.17	NA	404.64	0.00	404.64
RMW-27B	Main Sand (Shallow)	01/09/07	429.81	NA	32.57	NA	397.24	0.00	397.24
RMW-28A	N. Olive	01/09/07	432.42	NA	27.28	NA	405.14	0.00	405.14
RMW-28B	EPA	01/09/07	432.42						
RMW-28C (T 1/7/05)	Main Sand (below D Clay)	01/09/07	432.54	NA	37.27	NA	395.27	0.00	395.27
RMW-29A	Main Silt	01/09/07	432.65	NA	37.02	NA	395.63	0.00	395.63
RMW-30A	Main Silt	01/09/07	428.96	NA	25.34	NA	403.62	0.00	403.62
RMW-30B	Main Sand (Shallow)	01/09/07	428.89	NA	33.77	NA	395.12	0.00	395.12
RMW-31A	Main Silt	01/09/07	433.26	NA	DRY	NA	--	0.00	--
RMW-31B	Main Sand (Shallow)	01/09/07	433.35	38.20	42.55	395.15	390.80	4.35	394.19
RMW-31C	Main Sand (Intermediate)	01/09/07	433.05	NA	38.66	NA	394.39	0.00	394.39
RMW-31D	Main Sand (Deep)	01/09/07	432.96	NA	38.11	NA	394.85	0.00	394.85

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RMW-31E	Main Sand (Basal)	01/09/07	432.86	NA	38.32	NA	394.54	0.00	394.54
RMW-32A	Main Silt	01/09/07	429.52	NA	21.68	NA	407.84	0.00	407.84
RMW-32B	Main Sand (Shallow)	01/09/07	429.37	34.12	37.02	395.25	392.35	2.90	394.61
RMW-33A	N. Olive	01/09/07	434.59	NA	22.93	NA	411.66	0.00	411.66
RMW-33B	B/C Clay (Permeable Lens)	01/09/07	434.51	NA	24.33	NA	410.18	0.00	410.18
RMW-33C	EPA	01/09/07	434.59	NA	39.01	NA	395.58	0.00	395.58
RMW-33D	Main Sand (T 2/27/05) (below D Clay)	01/09/07	434.64	NA	39.21	NA	395.43	0.00	395.43
RMW-34A	N. Olive Transducer	01/09/07	432.24	NA	18.22	NA	414.02	0.00	414.02
RMW-34B	EPA (T 1/7/05)	01/09/07	431.81	NA	35.59	NA	396.22	0.00	396.22
RMW-34C	Main Sand (T 1/7/05) (below D Clay)	01/09/07	431.95	NA	36.36	NA	395.59	0.00	395.59
RMW-34D	Main Sand (Intermediate)	01/09/07	432.24	NA	36.66	NA	395.58	0.00	395.58
RMW-34E	Main Sand (Deep)	01/09/07	432.13	NA	36.53	NA	395.60	0.00	395.60
RMW-34F	Main Sand (Basal)	01/09/07	432.26	NA	36.65	NA	395.61	0.00	395.61
RMW-35A	N. Olive	01/09/07	431.99	NA	17.65	NA	414.34	0.00	414.34
RMW-35B	EPA	01/09/07	432.32	NA	34.01	NA	398.31	0.00	398.31

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RMW-35C	Main Sand (below D Clay)	01/09/07	432.06	NA	36.53	NA	395.53	0.00	395.53
RMW-35D	Main Sand (Intermediate)	01/09/07	431.70	NA	36.11	NA	395.59	0.00	395.59
RMW-35E	Main Sand (Deep)	01/09/07	431.82	NA	36.23	NA	395.59	0.00	395.59
RMW-35F	Main Sand (Basal)	01/09/07	432.35	NA	36.72	NA	395.63	0.00	395.63
RMW-36A	N. Olive	01/09/07	431.57	NA	20.29	NA	411.28	0.00	411.28
RMW-36B	EPA	01/09/07	431.37	NA	34.14	NA	397.23	0.00	397.23
RMW-36C	Main Sand (below D Clay)	01/09/07	431.67	NA	36.12	NA	395.55	0.00	395.55
RMW-36D	Main Sand (Intermediate)	01/09/07	431.12	NA	35.54	NA	395.58	0.00	395.58
RMW-36E	Main Sand (Deep)	01/09/07	431.02	NA	35.41	NA	395.61	0.00	395.61
RMW-36F	Main Sand (Basal)	01/09/07	431.19	NA	35.58	NA	395.61	0.00	395.61
RMW-37A	Main Silt	01/09/07	431.40	NA	19.23	NA	412.17	0.00	412.17
RMW-37B	Main Sand (Shallow)	01/09/07	431.50	NA	35.79	NA	395.71	0.00	395.71
RMW-38A (T 12/7/04-1/6/05)	Main Sand (below D Clay)	01/09/07	433.00						Skimmer Pump in Well
RMW-39A	Main Silt	01/09/07	431.06	NA	17.99	NA	413.07	0.00	413.07
RMW-39B	Main Silt	01/09/07	431.29	NA	28.61	NA	402.68	0.00	402.68

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WELL	Stratum Screened	DATE	(A) Top of Casing Elevation (ft)	(B) Depth to Hydrocarbon (ft)	(C) Depth to Water (ft)	(A)-(B) Hydrocarbon Surface Elevation (ft)	(A)-(C) Water Surface Elevation (ft)	(C)-(B) Hydrocarbon Thickness (ft)	Piezometric Surface Elevation ¹ (ft)
RMW-39C	Main Sand (Shallow)	01/09/07	431.27	NA	34.98	NA	396.29	0.00	396.29
RMW-40 (T 2/27/05)	EPA	01/09/07	432.41	NA	36.45	NA	395.96	0.00	395.96
RMW-41A Transducer	Main Sand (Intermediate)	01/09/07	434.03	NA	38.93	NA	395.10	0.00	395.10
RMW-41B	Main Sand (Deep)	01/09/07	433.97	NA	38.78	NA	395.19	0.00	395.19
RMW-41C	Main Sand (Basal)	01/09/07	434.05	NA	38.76	NA	395.29	0.00	395.29
RMW-42A	N. Olive	01/09/07	431.76	NA	DRY	NA	--	0.00	--
RMW-42B	EPA	01/09/07	432.01	NA	36.13	NA	395.88	0.00	395.88
RMW-42C Transducer	Main Sand (below D Clay)	01/09/07	431.98	NA	36.32	NA	395.66	0.00	395.66
RMW-43A	Main Sand (Intermediate)	01/10/07	433.74	NA	35.13	NA	398.61	0.00	398.61
RMW-43B	Main Sand (Deep)	01/10/07	433.25	NA	34.62	NA	398.63	0.00	398.63
RMW-43C	Main Sand (Basal)	01/10/07	432.67	NA	34.05	NA	398.62	0.00	398.62
RMW-44A	Main Sand (Intermediate)	01/09/07	431.24	NA	35.55	NA	395.69	0.00	395.69
RMW-44B	Main Sand (Deep)	01/09/07	431.16	NA	35.49	NA	395.67	0.00	395.67
RMW-44C	Main Sand (Basal)	01/09/07	430.95	NA	35.23	NA	395.72	0.00	395.72
RMW-45A	N. Olive	01/09/07	430.84	NA	16.88	NA	413.96	0.00	413.96

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TABLE 4
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1190500002 -- Madison County -- ILD041889023
 The Premcor Refining Group Inc. / Hartford, Illinois

WELL	Stratum Screened	DATE	(A) Top of Casing Elevation (ft)	(B) Depth to Hydrocarbon (ft)	(C) Depth to Water (ft)	(A)-(B) Hydrocarbon Surface Elevation (ft)	(A)-(C) Water Surface Elevation (ft)	(C)-(B) Hydrocarbon Thickness (ft)	Piezometric Surface Elevation (ft)
RMW-45B	Main Sand (Shallow)	01/09/07	430.80				Skimmer Pump in Well		
RMW-45C	Main Sand (Shallow)	01/09/07	430.75	NA	35.02	NA	395.73	0.00	395.73
RMW-46A	N. Olive	01/09/07	428.79	NA	DRY	NA	--	0.00	--
RMW-46B	EPA	01/09/07	429.07	NA	33.06	NA	396.01	0.00	396.01
RMW-46C	Main Sand (below D Clay)	01/09/07	428.98	NA	33.36	NA	395.62	0.00	395.62
RMW-47A	N. Olive	01/09/07	433.82	NA	22.12	NA	411.70	0.00	411.70
RMW-47B Transducer	EPA	01/09/07	433.50	37.98	38.42	395.52	395.08	0.44	395.42
RMW-47C	Main Sand (below D Clay)	01/09/07	433.48	NA	38.01	NA	395.47	0.00	395.47
RMW-48A	N. Olive	01/09/07	433.82	NA	17.56	NA	416.26	0.00	416.26
RMW-48B	Main Sand (Shallow)	01/09/07 ***	435.99			H2A Present			
RMW-49A	N. Olive	01/09/07	429.86	NA	16.19	NA	413.67	0.00	413.67
RMW-49B	Main Sand (Shallow)	01/09/07 ***	433.58	37.49	39.19	396.09	394.39	1.70	395.72
RMW-50A	Main Sand (Shallow)	01/10/07	431.82	NA	34.28	NA	397.54	0.00	397.54
RMW-50B	Main Sand (Intermediate)	01/10/07	431.66	NA	34.16	NA	397.50	0.00	397.50
RMW-50C	Main Sand (Deep)	01/10/07	431.64	NA	34.13	NA	397.51	0.00	397.51

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RMW-50D	Main Sand (Basal)	01/10/07	431.60	NA	34.01	NA	397.59	0.00	397.59
RMW-51A	Main Sand (Shallow)	01/10/07	428.59	NA	30.64	NA	397.95	0.00	397.95
RMW-51B	Main Sand (Intermediate)	01/10/07	428.42	NA	30.33	NA	398.09	0.00	398.09
RMW-51C	Main Sand (Deep)	01/10/07	428.70	NA	30.61	NA	398.09	0.00	398.09
RMW-51D	Main Sand (Basal)	01/10/07	428.20	NA	30.14	NA	398.06	0.00	398.06
RMW-52A	Main Sand (Shallow)	01/10/07	432.37	NA	33.30	NA	399.07	0.00	399.07
RMW-52B	Main Sand (Intermediate)	01/10/07	432.30	NA	33.24	NA	399.06	0.00	399.06
RMW-52C	Main Sand (Deep)	01/10/07	432.26	NA	33.18	NA	399.08	0.00	399.08
RMW-52D	Main Sand (Basal)	01/10/07	432.21	NA	33.12	NA	399.09	0.00	399.09
RMW-53A	Main Sand (Intermediate)	01/10/07	433.55	NA	34.08	NA	399.47	0.00	399.47
RMW-53B	Main Sand (Deep)	01/10/07	433.46	NA	33.96	NA	399.50	0.00	399.50
RMW-53C	Main Sand (Basal)	01/10/07	433.46	NA	33.97	NA	399.49	0.00	399.49
RMW-54A	Main Sand (Intermediate)	01/10/07	431.80	NA	32.28	NA	399.52	0.00	399.52
RMW-54B	Main Sand (Deep)	01/10/07	431.70	NA	32.17	NA	399.53	0.00	399.53
RMW-54C	Main Sand (Basal)	01/10/07	431.59	NA	32.06	NA	399.53	0.00	399.53

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RMW-55A	Main Sand (Intermediate)	01/10/07	429.86	NA	30.36	NA	399.50	0.00	399.50
RMW-55B	Main Sand (Deep)	01/10/07	429.99	NA	30.48	NA	399.51	0.00	399.51
RMW-55C	Main Sand (Basal)	01/10/07	430.06	NA	30.57	NA	399.49	0.00	399.49
RMW-56A Transducer	EPA	01/09/07	434.71	40.69	40.90	394.02	393.81	0.21	393.97
RMW-56B Transducer	Main Sand (below D Clay)	01/09/07	434.61	NA	40.69	NA	393.92	0.00	393.92
RMW-57A	EPA	01/09/07 ***	436.03			H2A Present			
RMW-57B	Main Sand (below D Clay)	01/09/07 ***	435.98			H2A Present			
RMW-58A	EPA	01/09/07	430.93	33.17	35.85	397.76	395.08	2.68	397.17
RMW-58B	Main Sand	01/09/07	430.98	35.17	35.54	395.81	395.44	0.37	395.73
RMW-59A	EPA	01/09/07	430.83	33.10	35.79	397.73	395.04	2.69	397.14
RMW-59B	Main Sand (below D Clay)	01/09/07	430.97	NA	35.25	NA	395.72	0.00	395.72
RMW-60A	N. Olive	01/09/07	430.79	NA	17.71	NA	413.08	0.00	413.08
RMW-60B	EPA	01/09/07	430.78	33.17	35.78	397.61	395.00	2.61	397.04
RMW-60C	Main Sand (below D Clay)	01/09/07	430.78	33.85	39.67	396.93	391.11	5.82	395.65
RMW-61A	EPA	01/09/07	429.91	32.60	34.72	397.31	395.19	2.12	396.84

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WELL	Stratum Screened	DATE	(A) Top of Casing Elevation (ft)	(B) Depth to Hydrocarbon (ft)	(C) Depth to Water (ft)	(A)-(B) Hydrocarbon Surface Elevation (ft)	(A)-(C) Water Surface Elevation (ft)	(C)-(B) Hydrocarbon Thickness ¹ (ft)	Piezometric Surface Elevation ¹ (ft)
RMW-61B	Main Sand (below D Clay)	01/09/07	429.71	NA	34.33	NA	395.38	0.00	395.38
RMW-62A	EPA	01/09/07	429.70	32.35	34.57	397.35	395.13	2.22	396.86
RMW-62B Transducer	Main Sand (below D Clay)	01/09/07	429.52	NA	34.09	NA	395.43	0.00	395.43
RMW-63A	N. Olive	01/09/07	429.75	NA	14.04	NA	415.71	0.00	415.71
RMW-63B	EPA	01/09/07	429.63	NA	32.80	NA	396.83	0.00	396.83
RMW-63C	Main Sand (below D Clay)	01/09/07	429.53	NA	34.02	NA	395.51	0.00	395.51
RMW-64A	A Clay		433.52	--	--	--	--	--	--
RMW-64B	EPA	01/09/07	433.52	37.85	38.59	395.67	394.93	0.74	395.51
RMW-64C	Main Sand (below D Clay)	01/09/07	433.61	NA	38.12	NA	395.49	0.00	395.49
RMW-65A	Main Silt	01/09/07	433.79	NA	30.00	NA	403.79	0.00	403.79
RMW-65B	Main Sand	01/09/07	433.90	NA	38.05	NA	395.85	0.00	395.85
RMW-65C	Main Sand (Intermediate)	01/09/07	433.80	NA	37.86	NA	395.94	0.00	395.94
RMW-65D	Main Sand (Deep)	01/09/07	433.70	NA	37.73	NA	395.97	0.00	395.97
RMW-65E	Main Sand (Basal)	01/09/07	433.78	NA	37.79	NA	395.99	0.00	395.99

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WELL	Stratum Screened	DATE	(A) Top of Casing Elevation (ft)	(B) Depth to Hydrocarbon (ft)	(C) Depth to Water (ft)	(A)-(B) Hydrocarbon Surface Elevation (ft)	(A)-(C) Water Surface Elevation (ft)	(C)-(B) Hydrocarbon Thickness (ft)	Piezometric Surface Elevation ¹ (ft)
RMW-66A	Main Silt	01/09/07	430.15	NA	25.80	NA	404.35	0.00	404.35
RMW-66B	Main Sand (Shallow)	01/09/07	430.09	NA	34.06	NA	396.03	0.00	396.03
RMW-66C	Main Sand (Intermediate)	01/09/07	430.19	NA	34.15	NA	396.04	0.00	396.04
RMW-66D	Main Sand (Deep)	01/09/07	429.89	NA	33.85	NA	396.04	0.00	396.04
RMW-66E	Main Sand (Basal)	01/09/07	429.99	NA	33.93	NA	396.06	0.00	396.06
RMW-67A	Main Silt	01/09/07	430.99	NA	DRY	NA	--	0.00	--
RMW-67B	Main Sand (Shallow)	01/09/07	431.12	NA	35.06	NA	396.06	0.00	396.06
RMW-67C	Main Sand (Intermediate)	01/09/07	430.94	NA	34.87	NA	396.07	0.00	396.07
RMW-68A	N. Olive	01/09/07	432.70	NA	18.62	NA	414.08	0.00	414.08
RMW-68B	B/C Clay (Permeable Lens)	01/09/07	432.92	29.59	29.62	403.33	403.30	0.03	403.32
RMW-68C	EPA	01/09/07	432.76	NA	35.28	NA	397.48	0.00	397.48
RMW-68D	Main Sand (below D Clay)	01/09/07	432.63	NA	36.53	NA	396.10	0.00	396.10
RMW-68E	Main Sand (Intermediate)	01/09/07	432.51	NA	36.31	NA	396.20	0.00	396.20
RMW-68F	Main Sand (Deep)	01/09/07	432.51	NA	36.29	NA	396.22	0.00	396.22
RMW-68G	Main Sand (Basal)	01/09/07	432.46	NA	36.27	NA	396.19	0.00	396.19

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1190500002 -- Madison County -- ILD041889023
 The Premcor Refining Group Inc. / Hartford, Illinois

WELL	Stratum Screened	DATE	(A) Top of Casing Elevation (ft)	(B) Depth to Hydrocarbon (ft)	(C) Depth to Water (ft)	(A)-(B) Hydrocarbon Surface Elevation (ft)	(A)-(C) Water Surface Elevation (ft)	(C)-(B) Hydrocarbon Thickness (ft)	Piezometric Surface Elevation (ft)
RMW-69A	N. Olive	01/09/07	432.35	NA	14.85	NA	417.50	0.00	417.50
RMW-69B	EPA	01/09/07	432.41	NA	34.73	NA	397.68	0.00	397.68
RMW-69C	Main Sand (below D Clay)	01/09/07	432.43	NA	35.61	NA	396.82	0.00	396.82
RMW-69D	Main Sand (Intermediate)	01/09/07	432.43	NA	35.50	NA	396.93	0.00	396.93
RMW-69E	Main Sand (Deep)	01/09/07	432.56	NA	35.61	NA	396.95	0.00	396.95
RMW-69F	Main Sand (Basal)	01/09/07	432.69	NA	35.74	NA	396.95	0.00	396.95
RMW-70A	A Clay (Permeable Lens)	01/09/07	432.21	NA	20.05	NA	412.16	0.00	412.16
RMW-70B	Main Silt	01/09/07	432.30	NA	21.84	NA	410.46	0.00	410.46
RMW-70C	Main Sand (Shallow)	01/09/07	432.24	NA	35.00	NA	397.24	0.00	397.24
RMW-70D	Main Sand (Intermediate)	01/09/07	432.07	NA	34.73	NA	397.34	0.00	397.34
RMW-70E	Main Sand (Deep)	01/09/07	428.64	NA	31.35	NA	397.29	0.00	397.29
RMW-70F	Main Sand (Basal)	01/09/07	428.83	NA	31.53	NA	397.30	0.00	397.30
RMW-71A	Main Sand (Intermediate)	01/09/07	428.94	NA	29.42	NA	399.52	0.00	399.52
RMW-71B	Main Sand (Deep)	01/09/07	428.76	NA	29.24	NA	399.52	0.00	399.52
RMW-71C	Main Sand (Basal)	01/09/07	428.71	NA	29.15	NA	399.56	0.00	399.56

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RMW-72A	N. Olive	01/09/07	429.26	NA	DRY	NA	--	0.00	--
RMW-72B	EPA	01/09/07	429.30	33.00	36.31	396.30	392.99	3.31	395.57
RMW-72C	Main Sand (below D Clay)	01/09/07	429.26	NA	33.81	NA	395.45	0.00	395.45
RMW-73A	N. Olive	01/09/07	430.15	NA	15.88	NA	414.27	0.00	414.27
RMW-73B	EPA	01/09/07	430.12	34.28	34.30	395.84	395.82	0.02	395.84
RMW-73C	Main Sand (below D Clay)	01/09/07	430.16	NA	34.97	NA	395.19	0.00	395.19
RMW-74	N. Olive	01/09/07	433.84	NA	19.18	NA	414.66	0.00	414.66
RMW-75	N. Olive	01/09/07	432.57	NA	18.12	NA	414.45	0.00	414.45
RMW-76	N. Olive	01/09/07	432.34	NA	17.64	NA	414.70	0.00	414.70
RMW-77	N. Olive	01/09/07	429.61	NA	DRY	NA	--	0.00	--
RMW-78	N. Olive	01/09/07	429.41	NA	16.44	NA	412.97	0.00	412.97
RMW-79	N. Olive	01/09/07	429.60	NA	16.12	NA	413.48	0.00	413.48
RMW-93A	N. Olive	01/09/07	429.19	NA	DRY	NA	--	0.00	--
RMW-93B	EPA	01/09/07	429.18	32.73	35.97	396.45	393.21	3.24	395.74

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RMW-94A	N. Olive	01/09/07	429.61	NA	19.51	NA	410.10	0.00	410.10
RMW-94B	Main Sand (Shallow)	01/09/07	429.56	33.21	35.66	396.35	393.90	2.45	395.81
RMW-95	Main Sand (Shallow)	01/09/07 ***	432.66	36.78	38.51	395.88	394.15	1.73	395.50
RMW-96	Main Sand (Shallow)	01/09/07 ***	431.69	35.57	37.46	396.12	394.23	1.89	395.70
RMW-97	Main Sand (Shallow)	01/09/07 ***	432.94	36.89	38.99	396.05	393.95	2.10	395.59
RMW-98A	Main Silt	01/09/07	429.75	NA	DRY	NA	--	0.00	--
RMW-98B	Main Sand (Shallow)	01/09/07	429.69	33.33	34.96	396.36	394.73	1.63	396.00
RPW-01	EPA / Main	01/09/07	431.44	56.26	56.31	375.18	375.13	0.05	375.17
SVE-1S	N. Olive	01/09/07	431.11	NA	24.60	NA	406.51	0.00	406.51
SVE-1D	EPA	01/09/07	430.66	36.18	36.60	394.48	394.06	0.42	394.39
T-1*	Main Sand (Shallow)	01/10/07	431.44						
TH2-88 @P7 Well	Main Sand (Shallow)	01/09/07	430.88	NA	34.08	NA	396.80	0.00	396.80
River Dock North Staff Gauge	NA	01/09/07	--	NA	0.00	NA	--	0.00	--

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River Dock South Staff Gauge	NA	01/09/07	--	NA			Gauge Removed		
Fire Pond Staff Gauge	NA	01/09/07	442.21	NA	7.40	NA	434.81	0.00	434.81
Guard Basin Staff Gauge	NA	01/09/07	432.10	NA	15.46	NA	416.64	0.00	416.64

NOTES:

NA = Not Applicable

-- = No data

(T xx/xx/yyyy) = Date transducer installed in well, however, data may be from miniTROLL or manual gauging.

¹ Piezometric surface elevation = [(A)-(C)]+S.G.[(C)-(B)]

*** = TOC of well was temporarily altered with an extension (Extension length(ft) : RMW-57A - 1.80, RMW-57B- 1.79, RMW-48B-1.83, RMW-9C-1.73, RMP-10C- 2.55, RMP-11C-2.47, RMW-49B- 3.62, RMW-95 2.98, RMW-96-2.01, RMW-97-3.11)

SG = Specific gravity of hydrocarbon determined to be an average of 0.78 on the Premcor facility for data recorded during and after 9/03.

MP- and SVE-series installed by Clayton in 6/03. MP-series installed as vacuum monitoring probes. SVE-series installed as soil vapor extraction wells. MP- and SVE-series

not appropriate for determining groundwater flow.

RMW-series installed by Clayton.

Remaining wells installed by others. P-6N, E & S series wells immediately surround Production Well P-6.

TOC elevations surveyed to USGS datum by CMT.

Stratums qualified with a ? are currently under review.

Top of casing elevation changes present in the table indicate that the associated wells have been re-surveyed.

TABLE 5
COMPOUND/ANALYTE LIST FOR WATER SAMPLES - VOCs & Inorganics
The Hartford Area Hydrocarbon Plume Site

1190505040 -- Madison County -- ILR000128249
 The Hartford Working Group / Hartford, Illinois

PARAMETER	PREPARATION METHOD		ANALYTICAL METHOD		COMPOUND	METHOD DETECTION LIMIT * (mg/L)	PRACTICAL QUANTITATION LIMIT * (mg/L)	ACCEPTABLE DETECTION LIMIT ** (mg/L)
	Source	Method No.	Source	Method No.				
VOCs	SW-846	5030	SW-846	8260	Benzene	0.5	2	5
	SW-846	5030	SW-846	8260	Ethylbenzene	1	5	700
	SW-846	5030	SW-846	8260	Methyl tertiary butyl ether (MTBE)	0.5	2	70
	SW-846	5030	SW-846	8260	Toluene	1	5	1,000
	SW-846	5030	SW-846	8260	Xylenes (total)	1	5	10,000
Metals	SW-846	3020A	SW-846	7041	Antimony	0.0017	0.005	0.006
	SW-846	3020A	SW-846	7060A	Arsenic	0.0007	0.003	0.05
	SW-846	3005A	SW-846	6010	Barium	0.0024	0.005	2
	SW-846	3005A	SW-846	6010	Beryllium	0.0003	0.001	0.004
	SW-846	3005A	SW-846	6010	Cadmium	0.0003	0.002	0.005
	SW-846	3005A	SW-846	6010	Chromium-Total	0.004	0.01	0.1
	SW-846	3005A	SW-846	6010	Cobalt	0.0022	0.01	1
	SW-846	3005A	SW-846	6010	Iron	0.007	0.02	5
	SW-846	3020A	SW-846	7421	Lead	0.0004	0.002	0.0075
	--	--	SW-846	7470	Mercury	0.000051	0.0002	0.002
	SW-846	3005A	SW-846	6010	Nickel	0.0033	0.01	0.1
	SW-846	3020A	SW-846	7740	Selenium	0.0035	0.006	0.05
	SW-846	3005A	SW-846	6010	Silver	0.003	0.01	0.05
	SW-846	3005A	SW-846	6010	Vanadium	0.0032	0.01	0.049
	SW-846	3005A	SW-846	6010	Zinc	0.0021	0.01	5

TABLE 5
COMPOUND/ANALYTE LIST FOR WATER SAMPLES - VOCs & Inorganics
The Hartford Area Hydrocarbon Plume Site

1190505040 -- Madison County -- ILR000128249
 The Hartford Working Group / Hartford, Illinois

PARAMETER	PREPARATION METHOD		ANALYTICAL METHOD		COMPOUND	METHOD DETECTION LIMIT * (mg/L)	PRACTICAL QUANTITATION LIMIT * (mg/L)	ACCEPTABLE DETECTION LIMIT ** (mg/L)
	Source	Method No.	Source	Method No.				
<i>General</i>	--	--	Standard Method	M2320B	Alkalinity, Total (as, Ca, CO ₃)	0	0	NA
	--	--	EPA Method	E350.1	Ammonia as N	0.04	0.1	NA
	--	--	SW-846	9251.0	Chloride	0.6	1	200
	--	--	Standard Method	M5220D	COD	7.3	20	NA
	--	--	SW-846	9010B, 9014	Cyanide Total	0.003	0.007	0.2
	--	--	SW-846	9012A	Cyanide Total	0.003	0.007	0.2
	--	--	Standard Method	M2340C	Hardness (as, Ca, CO ₃)	3	5	NA
	--	--	EPA Method	E353.2	Nitrate as N	0.010	0.05	10.0
	--	--	EPA Method	E353.2	Nitrate-Nitrite	0.010	0.05	NA
	--	--	EPA Method	E353.2	Nitrite as N	0.01	0.05	NA
	--	--	EPA Method	E353.3	Nitrite as N	0.01	0.01	NA
	--	--	EPA Method	E365.2	Phosphorus as P	0.01	0.02	NA
	--	--	EPA Method	E365.2 (D)	Phosphorus, Dissolved as P	0.01	0.02	NA
	--	--	SW-846	9036.0	Sulfate	40	40	400
	--	--	SW-846	9038.0	Sulfate	1.0	5	400
	--	--	Standard Method	M4500SD	Sulfide	0.013	0.50	NA
	--	--	Standard Method	M2540C	Total Dissolved Solids	10	20	NA
	--	--	EPA Method	E415.1	Total Organic Carbon	0.5	1	NA
	--	--	Standard Method	M2540D	Total Suspended Solids	5	6	NA

NOTES:

mg/L = Milligrams per liter.

µg/L = Micrograms per liter

NA = Not available

* = Method detection limit and practical quantitation limit as identified by Teklab, Inc. (Hennessy, 2007).

** Acceptable detection limit is the IPCB TACO Tier 1 Groundwater Remediation Objective for Class I Groundwater.

-- = Not applicable

TABLE 6
SAMPLE CONTAINER, PRESERVATION, AND HOLDING TIME REQUIREMENTS FOR WATER SAMPLES
The Hartford Area Hydrocarbon Plume Site

1190505040 -- Madison County -- ILR000128249
 The Hartford Working Group / Hartford, Illinois

PARAMETER	ANALYSIS	HOLDING TIME	CONTAINER	PRESERVATION
Organics	BETX and MTBE	14 days	3-40 ml VOC vials	HCl to pH < 2, no headspace Maintained at 4 +/- 2 degrees Celcius
Metals	Inorganic Metals	180 days	500 ml plastic jar	HNO ₃ to pH<2 Maintained at 4 +/- 2 degrees Celcius
	Mercury	28 days		
General	Alkalinity	14 days	1 L plastic jar	Maintained at 4 +/- 2 degrees Celcius
	Chloride	28 days		
	Sulfate	28 days		
	Hardness	180 days		
	Nitrite	48 hours		
	Total Dissolved Solids (TDS)	7 days		
	Total Suspended Solids (TSS)	7 days		
	Total Cyanide	14 days	250 ml plastic jar	NaOH to pH>12 Maintained at 4 +/- 2 degrees Celcius
	Chemical Oxygen Demand (COD)	28 days	500 ml plastic jar	H ₂ SO ₄ to pH<2 Maintained at 4 +/- 2 degrees Celcius
	Ammonia, Total	28 days		
	Phosphorus, Total	28 days		
	Nitrate +/- Nitrite	28 days		
	Phosphorus, Dissolved	28 days	250 ml plastic	H ₂ SO ₄ to pH<2 Maintained at 4 +/- 2 degrees Celcius
	Total Organic Carbon (TOC)	28 days	125 ml plastic	H ₂ SO ₄ to pH<2 Maintained at 4 +/- 2 degrees Celcius
	Sulfide, Total	7 days	250 ml plastic jar	NaOH and ZnAcetate to pH>9 Maintained at 4 +/- 2 degrees Celcius

Table 7
Summary of Groundwater Analytical Results
BTEX and MTBE
January 2007

The Hartford Working Group / Hartford, Illinois
1190505040 -- Madison County -- ILR000128249

PERIOD: From 01/15/2007 thru 01/17/2007 - Inclusive

SAMPLE TYPE: Water

SITE	DATE	RESULT		SAMPLE ID	Benzene	Ethylbenzene	Toluene	Xylene (total)	Methyl tert-butyl ether
		TYPE	(ug/l)		(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)
COMPARISON VALUE					5	700	1000	10000	70
HMW-25	01/15/2007	Prim	HMW-25/070115	<2.0	<5.0	<5.0	<5.0	<5.0	<2.0
HMW-25	01/15/2007	Dup 1	DUP-001/070115	<2.0	<5.0	<5.0	<5.0	<5.0	<2.0
HMW-26	01/15/2007	Prim	HMW-26/070115	<2.0	<5.0	<5.0	<5.0	<5.0	<2.0
HMW-27	01/15/2007	Prim	HMW-27/070115	<2.0	<5.0	<5.0	<5.0	<5.0	<2.0
HMW-28	01/15/2007	Prim	HMW-28/070115	<2.0R	<5.0R	<5.0	<5.0R	<5.0	<2.0
HMW-29	01/16/2007	Prim	HMW-29/070116	<2.0	<5.0R	<5.0	<5.0	<5.0	<2.0
HMW-39B	01/15/2007	Prim	HMW-39B/070111	<2.0	<5.0	<5.0	<5.0	<5.0	<2.0
HMW-39C	01/15/2007	Prim	HMW-39C/070111	<2.0	<5.0	<5.0	<5.0	<5.0	<2.0
HMW-39C	01/15/2007	Dup 1	DUP-001/070115	<2.0	<5.0	<5.0	<5.0	<5.0	<2.0
HMW-40C	01/16/2007	Prim	HMW-40C/070111	<2.0	<5.0	<5.0	<5.0	<5.0	<2.0
HMW-49B	01/15/2007	Prim	HMW-49B/070111	73.1	391	<25.0	51.8	<10	
HMW-49C	01/16/2007	Prim	HMW-49C/070111	304	2220	1600	5940	404	
HMW-49D	01/16/2007	Prim	HMW-49D/070111	116	1.8J	6.7	10.3	37.2	
HMW-50A	01/16/2007	Prim	HMW-50A/070111	<2.0R	<5.0	<5.0	<5.0R	<5.0	<2.0
HMW-50B	01/15/2007	Prim	HMW-50B/070111	<2.0	<5.0R	<5.0	<5.0	<5.0	<2.0
HMW-50B	01/15/2007	Dup 1	DUP-002/070111	<2.0	<5.0	<5.0	<5.0	<5.0	<2.0
HMW-50C	01/16/2007	Prim	HMW-50C/070111	127	<5.0	8.5	9.1	6.3	
HMW-52C	01/17/2007	Prim	HMW-52C/070111	<2.0	<5.0	<5.0	<5.0	<5.0	<2.0
MP-81C	01/16/2007	Prim	MP-81C/070116	<2.0	<5.0	<5.0	<5.0	<5.0	<2.0

See Notes at End of Table

Table 7
Summary of Groundwater Analytical Results
BTEX and MTBE
January 2007
The Hartford Working Group / Hartford, Illinois
1190505040 -- Madison County -- ILR000128249

PERIOD: From 01/15/2007 thru 01/17/2007 - Inclusive

SAMPLE TYPE: Water

SITE	DATE	RESULT		SAMPLE ID	Benzene (ug/l)	Ethylbenzene (ug/l)	Toluene (ug/l)	Xylene (total) (ug/l)	Methyl tert-butyl ether (ug/l)
		TYPE							
COMPARISON VALUE									
MP-89C	01/16/2007	Prim		MP-89C/070116	<2.0	<5.0	<5.0	<5.0	<2.0
MP-92D	01/16/2007	Prim		MP-92D/070116	<2.0	<5.0	<6.0	<5.0	<2.0

See Notes at End of Table



NOTES

TABLES 7, 8 and 9

Comparison values are Tier 1 Class 1 Groundwater Remediation Objectives from Illinois EPA's Tiered Approach to Corrective Action Objectives (35 IAC Part 742). Groundwater quality values listed in 35 IAC Part 742 used for comparison purposes only.

mg/L = Milligrams per liter.

µg/L = Micrograms per liter.

J = Estimated value. Compound detected below the practical quantitation limit (PQL).

R = RPD outside accepted recovery limits.

S = Spike Recovery outside of accepted recovery limits.

NA = Constituent not analyzed by laboratory.

Table 8
 Summary of Groundwater Analytical Results
 Metals (Total and Dissolved)
 January 2007

The Hartford Working Group / Hartford, Illinois
 1190505040 -- Madison County -- ILR000128249

PERIOD: From 01/15/2007 thru 01/17/2007 - Inclusive

SAMPLE TYPE: Water

CONSTITUENT	SITE	COMPARISON	HMW-25	HMW-25	HMW-26	HMW-27	HMW-28
	SAMPLE ID		HMW-25/070115	DUP-001/070115	HMW-26/070115	HMW-27/070115	HMW-28/070115
	DATE		01/15/2007	01/15/2007	01/15/2007	01/15/2007	01/15/2007
	RESULT TYPE		Primary	Duplicate 1	Primary	Primary	Primary
Antimony	(mg/l)	0.006	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Antimony (Dissolved)	(mg/l)	0.006	<0.0050	0.0020J	<0.0050	<0.0050	<0.0050
Arsenic	(mg/l)	0.05	<0.0030	<0.0030	0.0044	<0.0030	<0.0030
Arsenic (Dissolved)	(mg/l)	0.05	<0.0030	<0.0030	0.0025J	<0.0030	<0.0030
Barium	(mg/l)	2	0.280	0.285	0.171	0.166	0.0961
Barium (Dissolved)	(mg/l)	2	0.274	0.277	0.163	0.158	0.0941
Beryllium	(mg/l)	0.004	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Beryllium (Dissolved)	(mg/l)	0.004	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Cadmium	(mg/l)	0.005	<0.0020	<0.0020	0.0005J	<0.0020	0.0004J
Cadmium (Dissolved)	(mg/l)	0.005	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
Chromium	(mg/l)	0.1	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100
Chromium (Dissolved)	(mg/l)	0.1	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100
Cobalt	(mg/l)	1	<0.0100	<0.0100	<0.0100	0.0050J	0.0111
Cobalt (Dissolved)	(mg/l)	1	<0.0100	<0.0100	0.0025J	0.0072J	0.0115
Iron	(mg/l)	5	<0.0200	<0.0200	25.3	3.07	0.0496
Iron (Dissolved)	(mg/l)	5	<0.0200	<0.0200	24.4	2.58	<0.0200
Lead	(mg/l)	0.0075	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
Lead (Dissolved)	(mg/l)	0.0075	<0.0020	<0.0020	0.0008J	<0.0020	<0.0020
Mercury	(mg/l)	0.002	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020
Mercury (Dissolved)	(mg/l)	0.002	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020
Nickel	(mg/l)	0.1	0.0095J	0.0095J	<0.0100	0.0096J	0.0204

See Notes at End of Table

Table 8
 Summary of Groundwater Analytical Results
 Metals (Total and Dissolved)
 January 2007
 The Hartford Working Group / Hartford, Illinois
 1190505040 -- Madison County -- ILR000128249

PERIOD: From 01/15/2007 thru 01/17/2007 - Inclusive

SAMPLE TYPE: Water

CONSTITUENT	SITE	COMPARISON	HMW-25	HMW-25	HMW-26	HMW-27	HMW-28
	SAMPLE ID		HMW-25/070115	DUP-001/070115	HMW-26/070115	HMW-27/070115	HMW-28/070115
	DATE		01/15/2007	01/15/2007	01/15/2007	01/15/2007	01/15/2007
	RESULT TYPE	VALUE	Primary	Duplicate 1	Primary	Primary	Primary
Nickel (Dissolved)	(mg/l)	0.1	0.0091J	0.0093J	<0.0100	0.0105	0.0210
Selenium	(mg/l)	0.05	<0.0060	<0.0060	<0.0060	<0.0060	<0.0060
Selenium (Dissolved)	(mg/l)	0.05	<0.0060	<0.0060	<0.0060	<0.0060	<0.0060
Silver	(mg/l)	0.05	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100
Silver (Dissolved)	(mg/l)	0.05	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100
Vanadium	(mg/l)	0.049	<0.0100	<0.0100	0.0032J	<0.0100	<0.0100
Vanadium (Dissolved)	(mg/l)	0.049	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100
Zinc	(mg/l)	5	<0.0100	0.0025J	0.0033J	0.0055J	0.0077J
Zinc (Dissolved)	(mg/l)	5	0.0045J	0.0028J	0.0023J	0.0058J	0.0068J

See Notes at End of Table

Table 8
Summary of Groundwater Analytical Results
Metals (Total and Dissolved)
January 2007
The Hartford Working Group / Hartford, Illinois
1190505040 -- Madison County -- ILR000128249

PERIOD: From 01/15/2007 thru 01/17/2007 - Inclusive

SAMPLE TYPE: Water

CONSTITUENT	SITE	HMW-29	HMW-39B	HMW-39C	HMW-39C	HMW-40C
	SAMPLE ID	HMW-29/070116	HMW-39B/070115	HMW-39C/070115	DUP-001/070115	HMW-40C/070116
	DATE	01/16/2007	01/15/2007	01/15/2007	01/15/2007	01/16/2007
	RESULT TYPE	Primary	Primary	Primary	Duplicate 1	Primary
Antimony	(mg/l)	0.006	<0.0050	<0.0050	<0.0050	<0.0050
Antimony (Dissolved)	(mg/l)	0.006	<0.0050	<0.0050	0.0021J	<0.0050
Arsenic	(mg/l)	0.05	0.0018J	<0.0030	<0.0030	<0.0030
Arsenic (Dissolved)	(mg/l)	0.05	0.0010J	<0.0030	<0.0030	<0.0030
Barium	(mg/l)	2	0.126	0.229	0.327	0.341
Barium (Dissolved)	(mg/l)	2	0.126	0.233	0.336	0.334
Beryllium	(mg/l)	0.004	<0.0010	<0.0010	<0.0010	<0.0010
Beryllium (Dissolved)	(mg/l)	0.004	<0.0010	<0.0010	<0.0010	<0.0010
Cadmium	(mg/l)	0.005	0.0006J	<0.0020	<0.0020	<0.0020
Cadmium (Dissolved)	(mg/l)	0.005	<0.0020	<0.0020	<0.0020	<0.0020
Chromium	(mg/l)	0.1	<0.0100	<0.0100	<0.0100	<0.0100
Chromium (Dissolved)	(mg/l)	0.1	0.0048J	<0.0100	<0.0100	<0.0100
Cobalt	(mg/l)	1	<0.0100	<0.0100	<0.0100	<0.0100
Cobalt (Dissolved)	(mg/l)	1	<0.0100	<0.0100	<0.0100	0.0023J
Iron	(mg/l)	5	6.48S	0.0722	3.82	3.90
Iron (Dissolved)	(mg/l)	5	6.74	<0.0200	3.26	3.26
Lead	(mg/l)	0.0075	<0.0020	<0.0020	<0.0020	0.0011J
Lead (Dissolved)	(mg/l)	0.0075	<0.0020	<0.0020	<0.0020	<0.0020
Mercury	(mg/l)	0.002	<0.00020	<0.00020	<0.00020	<0.00020
Mercury (Dissolved)	(mg/l)	0.002	<0.00020	<0.00020	<0.00020	<0.00020

See Notes at End of Table

Table 8
 Summary of Groundwater Analytical Results
 Metals (Total and Dissolved)
 January 2007
 The Hartford Working Group / Hartford, Illinois
 1190505040 -- Madison County -- ILR000128249

PERIOD: From 01/15/2007 thru 01/17/2007 - Inclusive

SAMPLE TYPE: Water

CONSTITUENT	SITE	HMW-29	HMW-39B	HMW-39C	HMW-39C	HMW-40C
	SAMPLE ID	HMW-29/070116	HMW-39B/070115	HMW-39C/070115	DUP-001/070115	HMW-40C/070116
	DATE	01/16/2007	01/15/2007	01/15/2007	01/15/2007	01/16/2007
	RESULT TYPE	VALUE	Primary	Primary	Duplicate 1	Primary
Nickel	(mg/l)	0.1	0.0039J	<0.0100	<0.0100	<0.0100
Nickel (Dissolved)	(mg/l)	0.1	0.0041J	<0.0100	<0.0100	<0.0100
Selenium	(mg/l)	0.05	<0.0060	<0.0060	<0.0060	<0.0060
Selenium (Dissolved)	(mg/l)	0.05	<0.0060	<0.0060	<0.0060	<0.0394
Silver	(mg/l)	0.05	<0.0100	<0.0100	<0.0100	<0.0100
Silver (Dissolved)	(mg/l)	0.05	<0.0100	<0.0100	<0.0100	<0.0100
Vanadium	(mg/l)	0.049	<0.0100	<0.0100	<0.0100	<0.0100
Vanadium (Dissolved)	(mg/l)	0.049	0.0074J	<0.0100	<0.0100	<0.0100
Zinc	(mg/l)	5	0.0093J	0.0208	0.0393	0.0379
Zinc (Dissolved)	(mg/l)	5	0.0063J	0.0234	0.0196	0.0193

See Notes at End of Table

Table 8
 Summary of Groundwater Analytical Results
 Metals (Total and Dissolved)
 January 2007
 The Hartford Working Group / Hartford, Illinois
 1190505040 -- Madison County -- ILR000128249

PERIOD: From 01/15/2007 thru 01/17/2007 - Inclusive

SAMPLE TYPE: Water

CONSTITUENT	SITE	SAMPLE ID	HMW-49B	HMW-49C	HMW-49D	HMW-50A	HMW-50B
	DATE		HMW-49B/070115	HMW-49C/070116	HMW-49D/070116	HMW-50A/070116	HMW-50B/070115
	RESULT TYPE	VALUE	Primary	Primary	Primary	Primary	Primary
Antimony	(mg/l)	0.006	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Antimony (Dissolved)	(mg/l)	0.006	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Arsenic	(mg/l)	0.05	0.0187	0.0055	0.0011J	0.0009J	<0.0030
Arsenic (Dissolved)	(mg/l)	0.05	0.0189	0.0027J	<0.0030	<0.0030	<0.0030
Barium	(mg/l)	2	0.640	0.380	0.325	0.0484	0.351
Barium (Dissolved)	(mg/l)		0.630	0.315	0.282	0.0409	0.312
Beryllium	(mg/l)	0.004	<0.0010	0.0003J	<0.0010	<0.0010	<0.0010
Beryllium (Dissolved)	(mg/l)	0.004	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Cadmium	(mg/l)	0.005	<0.0020	0.0014J	0.0008J	0.0013J	0.0003J
Cadmium (Dissolved)	(mg/l)	0.005	<0.0020	0.0003J	0.0004J	0.0006J	<0.0020
Chromium	(mg/l)	0.1	<0.0100	0.0237	<0.0100	0.0288	0.0042J
Chromium (Dissolved)	(mg/l)	0.1	<0.0100	<0.0100	<0.0100	0.0309	<0.0100
Cobalt	(mg/l)	1	0.0072J	0.0110	0.0034J	<0.0100	<0.0100
Cobalt (Dissolved)	(mg/l)	1	0.0077J	0.0034J	<0.0100	<0.0100	<0.0100
Iron	(mg/l)	5	30.3	31.4	32.4	0.852	9.26
Iron (Dissolved)	(mg/l)	5	28.7	17.4	28.1	<0.0200	4.00
Lead	(mg/l)	0.0075	0.0027	0.0226	0.0044	<0.0020	0.0017J
Lead (Dissolved)	(mg/l)	0.0075	0.0016J	0.0129	<0.0020	<0.0020	<0.0020
Mercury	(mg/l)	0.002	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020
Mercury (Dissolved)	(mg/l)	0.002	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020

See Notes at End of Table

Table 8
 Summary of Groundwater Analytical Results
 Metals (Total and Dissolved)
 January 2007
 The Hartford Working Group / Hartford, Illinois
 1190505040 -- Madison County -- ILR000128249

PERIOD: From 01/15/2007 thru 01/17/2007 - Inclusive

SAMPLE TYPE: Water

CONSTITUENT	SITE	COMPARISON	HMW-49B	HMW-49C	HMW-49D	HMW-50A	HMW-50B
	SAMPLE ID		HMW-49B/070115	HMW-49C/070116	HMW-49D/070116	HMW-50A/070116	HMW-50B/070115
	DATE		01/15/2007	01/16/2007	01/16/2007	01/16/2007	01/15/2007
	RESULT TYPE	VALUE	Primary	Primary	Primary	Primary	Primary
Nickel	(mg/l)	0.1	0.0057J	0.0233	0.0050J	0.0038J	0.0045J
Nickel (Dissolved)	(mg/l)	0.1	0.0062J	0.0046J	<0.0100	<0.0100	<0.0100
Selenium	(mg/l)	0.05	<0.0060	<0.0060	<0.0060	0.0054J	<0.0060
Selenium (Dissolved)	(mg/l)	0.05	<0.0060	<0.0060	<0.0060	0.0056J	<0.0060
Silver	(mg/l)	0.05	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100
Silver (Dissolved)	(mg/l)	0.05	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100
Vanadium	(mg/l)	0.049	0.0053J	0.0312	0.0037J	0.0056J	0.0080J
Vanadium (Dissolved)	(mg/l)	0.049	0.0048J	0.0087J	0.0059J	0.0068J	<0.0100
Zinc	(mg/l)	5	0.0097J	0.496	0.0587	0.0059J	0.0180
Zinc (Dissolved)	(mg/l)	5	0.0034J	0.0806	0.0032J	0.0039J	0.0063J

See Notes at End of Table

Table 8
 Summary of Groundwater Analytical Results
 Metals (Total and Dissolved)
 January 2007

The Hartford Working Group / Hartford, Illinois
 1190505040 -- Madison County -- ILR000128249

PERIOD: From 01/15/2007 thru 01/17/2007 - Inclusive

SAMPLE TYPE: Water

CONSTITUENT	SITE	COMPARISON	HMW-50B	HMW-50C	HMW-52C	MP-81C	MP-89C
	SAMPLE ID		DUP-002/0701115	HMW-50C/070116	HMW-52C/070117	MP-81C/070116	MP-89C/070116
	DATE		01/15/2007	01/16/2007	01/17/2007	01/16/2007	01/16/2007
	RESULT TYPE		Duplicate 1	Primary	Primary	Primary	Primary
Antimony	(mg/l)	0.006	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Antimony (Dissolved)	(mg/l)	0.006	0.0028J	<0.0050	<0.0050	<0.0050	<0.0050
Arsenic	(mg/l)	0.05	0.0010J	<0.0030	0.0067	<0.0030	0.0053
Arsenic (Dissolved)	(mg/l)	0.05	<0.0030	<0.0030	0.0022J	<0.0030	0.0026J
Barium	(mg/l)	2	0.352	0.255	0.507	0.0663	0.290
Barium (Dissolved)	(mg/l)	2	0.311	0.246	0.397	0.0646	0.148
Beryllium	(mg/l)	0.004	<0.0010	<0.0010	0.0003J	<0.0010	<0.0010
Beryllium (Dissolved)	(mg/l)	0.004	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Cadmium	(mg/l)	0.005	0.0006J	0.0005J	0.0020	0.0006J	0.0005J
Cadmium (Dissolved)	(mg/l)	0.005	<0.0020	0.0004J	<0.0020	0.0005J	0.0003J
Chromium	(mg/l)	0.1	0.0071J	0.0042J	0.0159	<0.0100	0.0044J
Chromium (Dissolved)	(mg/l)	0.1	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100
Cobalt	(mg/l)	1	<0.0100	0.0026J	0.0073J	0.0088J	0.0049J
Cobalt (Dissolved)	(mg/l)	1	<0.0100	<0.0100	<0.0100	0.0092J	0.0033J
Iron	(mg/l)	5	9.40S	4.14	34.0S	0.205	41.9
Iron (Dissolved)	(mg/l)	5	4.02	1.18	17.8S	0.012J	28.4
Lead	(mg/l)	0.0075	0.0042	<0.0020	0.0268	<0.0020	0.0039
Lead (Dissolved)	(mg/l)	0.0075	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
Mercury	(mg/l)	0.002	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020
Mercury (Dissolved)	(mg/l)	0.002	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020

See Notes at End of Table

Table 8
Summary of Groundwater Analytical Results
Metals (Total and Dissolved)
January 2007
The Hartford Working Group / Hartford, Illinois
1190505040 -- Madison County -- ILR000128249

PERIOD: From 01/15/2007 thru 01/17/2007 - Inclusive

SAMPLE TYPE: Water

CONSTITUENT	SITE	COMPARISON	HMW-50B	HMW-50C	HMW-52C	MP-81C	MP-89C
	SAMPLE ID		DUP-002/0701115	HMW-50C/070116	HMW-52C/070117	MP-81C/070116	MP-89C/070116
	DATE		01/15/2007	01/16/2007	01/17/2007	01/16/2007	01/16/2007
	RESULT TYPE		Duplicate 1	Primary	Primary	Primary	Primary
Nickel	(mg/l)	0.1	0.0045J	<0.0100	0.0177	0.0232	0.0116
Nickel (Dissolved)	(mg/l)	0.1	<0.0100	<0.0100	<0.0100	0.0222	0.0060J
Selenium	(mg/l)	0.05	<0.0060	<0.0060	<0.0060	<0.0060	0.0132
Selenium (Dissolved)	(mg/l)	0.05	<0.0060	<0.0060	<0.0060	<0.0060	<0.0060
Silver	(mg/l)	0.05	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100
Silver (Dissolved)	(mg/l)	0.05	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100
Vanadium	(mg/l)	0.049	0.0075J	<0.0100	0.0293	<0.0100	0.0097J
Vanadium (Dissolved)	(mg/l)	0.049	0.0039J	0.0078J	<0.0100	<0.0100	<0.0100
Zinc	(mg/l)	5	0.0364	0.0042J	0.374	0.0081J	0.0182
Zinc (Dissolved)	(mg/l)	5	0.0040J	0.0027J	0.0040J	0.0068J	0.0034J

See Notes at End of Table

Table 8
 Summary of Groundwater Analytical Results
 Metals (Total and Dissolved)
 January 2007
 The Hartford Working Group / Hartford, Illinois
 1190505040 -- Madison County -- ILR000128249

PERIOD: From 01/15/2007 thru 01/17/2007 - Inclusive

SAMPLE TYPE: Water

CONSTITUENT	SITE	SAMPLE ID	MP-92D
	DATE	COMPARISON	MP-92D/070116
	RESULT TYPE	VALUE	01/16/2007
Antimony	(mg/l)	0.006	<0.0050
Antimony (Dissolved)	(mg/l)	0.006	0.0021J
Arsenic	(mg/l)	0.05	0.0026J
Arsenic (Dissolved)	(mg/l)	0.05	0.0023J
Barium	(mg/l)	2	0.184
Barium (Dissolved)	(mg/l)	2	0.165
Beryllium	(mg/l)	0.004	<0.0010
Beryllium (Dissolved)	(mg/l)	0.004	<0.0010
Cadmium	(mg/l)	0.005	0.0005J
Cadmium (Dissolved)	(mg/l)	0.005	0.0004J
Chromium	(mg/l)	0.1	0.0051J
Chromium (Dissolved)	(mg/l)	0.1	0.0040J
Cobalt	(mg/l)	1	0.0036J
Cobalt (Dissolved)	(mg/l)	1	0.0029J
Iron	(mg/l)	5	8.20
Iron (Dissolved)	(mg/l)	5	7.05S
Lead	(mg/l)	0.0075	0.0012J
Lead (Dissolved)	(mg/l)	0.0075	<0.0020
Mercury	(mg/l)	0.002	<0.00020
Mercury (Dissolved)	(mg/l)	0.002	<0.00020
Nickel	(mg/l)	0.1	0.0057J

See Notes at End of Table

Table 8
Summary of Groundwater Analytical Results
Metals (Total and Dissolved)
January 2007
The Hartford Working Group / Hartford, Illinois
1190505040 -- Madison County -- ILR000128249

PERIOD: From 01/15/2007 thru 01/17/2007 - Inclusive

SAMPLE TYPE: Water

CONSTITUENT	SITE	MP-92D
	SAMPLE ID	MP-92D/070116
	DATE	01/16/2007
	RESULT TYPE	Primary
Nickel (Dissolved)	(mg/l)	0.1
		0.0038J
Selenium	(mg/l)	0.05
		<0.0060
Selenium (Dissolved)	(mg/l)	0.05
		<0.0060
Silver	(mg/l)	0.05
		<0.0100
Silver (Dissolved)	(mg/l)	0.05
		<0.0100
Vanadium	(mg/l)	0.049
		<0.0100
Vanadium (Dissolved)	(mg/l)	0.049
		<0.0100
Zinc	(mg/l)	5
		0.0138J
Zinc (Dissolved)	(mg/l)	5
		0.0033J

See Notes at End of Table



NOTES

TABLES 7, 8 and 9

Comparison values are Tier 1 Class 1 Groundwater Remediation Objectives from Illinois EPA's Tiered Approach to Corrective Action Objectives (35 IAC Part 742). Groundwater quality values listed in 35 IAC Part 742 used for comparison purposes only.

mg/L = Milligrams per liter.

µg/L = Micrograms per liter.

J = Estimated value. Compound detected below the practical quantitation limit (PQL).

R = RPD outside accepted recovery limits.

S = Spike Recovery outside of accepted recovery limits.

NA = Constituent not analyzed by laboratory.

Table 9

Summary of Groundwater Analytical Results

General Chemistry and Natural Attenuation Parameters

January 2007

The Hartford Working Group / Hartford, Illinois

1190505040 -- Madison County -- ILR000128249

PERIOD: From 01/15/2007 thru 01/17/2007 - Inclusive

SAMPLE TYPE: Water

CONSTITUENT	SITE	COMPARISON RESULT TYPE	HMW-25	HMW-25	HMW-26	HMW-27	HMW-28
	SAMPLE ID		HMW-25/070115	DUP-001/070115	HMW-26/070115	HMW-27/070115	HMW-28/070115
	DATE		01/15/2007	01/15/2007	01/15/2007	01/15/2007	01/15/2007
	VALUE		Primary	Duplicate 1	Primary	Primary	Primary
Alkalinity (as CaCO ₃)	(mg/l)		476	472	602	614	534
Ammonia (as N)	(mg/l)		<0.10	<0.10	0.15	<0.10	<0.10S
Chloride	(mg/l)	200	78	77	108S	24	30
COD	(mg/l)		120	100	30	30	21
Cyanide	(mg/l)	0.2	<0.007	<0.007	<0.007	<0.007	<0.007
Hardness (as CaCO ₃)	(mg/l)		510	500	790	840	610
Nitrate (as N)	(mg/l)	10	0.171	0.138	<0.050	0.052	2.18
Nitrate Plus Nitrite (as N)	(mg/l)		0.176	0.143	<0.050	0.055	2.25
Nitrite (as N)	(mg/l)		<0.010	<0.010	<0.010	<0.010	0.089
Phosphorus	(mg/l)		<0.020	0.022	0.383	0.042	0.035
Phosphorus (Dissolved)	(mg/l)		<0.020	0.013J	0.356	0.025	0.012J
Sulfate	(mg/l)	400	66	62	182	139	79
Sulfide	(mg/l)		<0.05	<0.05	<0.05	<0.05	<0.05
Total dissolved solids (TDS)	(mg/l)		680	690	1090	856	698
Total Organic Carbon	(mg/l)		0.7J	0.7J	1.6	2.7	3.3
Total suspended solids	(mg/l)		<6	<6	39	<6	<6

See Notes at End of Table

Table 9
 Summary of Groundwater Analytical Results
 General Chemistry and Natural Attenuation Parameters
 January 2007
 The Hartford Working Group / Hartford, Illinois
 1190505040 -- Madison County -- ILR000128249

PERIOD: From 01/15/2007 thru 01/17/2007 - Inclusive

SAMPLE TYPE: Water

CONSTITUENT	SITE	COMPARISON	HMW-29	HMW-39B	HMW-39C	HMW-39C	HMW-40C
	SAMPLE ID		HMW-29/070116	HMW-39B/070115	HMW-39C/070115	DUP-001/070115	HMW-40C/070116
	DATE		01/16/2007	01/15/2007	01/15/2007	01/15/2007	01/16/2007
	RESULT TYPE	VALUE	Primary	Primary	Primary	Duplicate 1	Primary
Alkalinity (as CaCO ₃)	(mg/l)		478	362	255	252	424
Ammonia (as N)	(mg/l)		<0.10	<0.10	0.12	0.14	<0.10
Chloride	(mg/l)	200	13	153	220	219	18
COD	(mg/l)		<20	16	23	23	16
Cyanide	(mg/l)	0.2	<0.007	<0.007	<0.007	<0.007	<0.007
Hardness (as CaCO ₃)	(mg/l)		530	330	330	290	480
Nitrate (as N)	(mg/l)	10	<0.050	0.732	0.013J	<0.050	0.098
Nitrate Plus Nitrite (as N)	(mg/l)		<0.050	0.732	0.016J	0.011J	0.129
Nitrite (as N)	(mg/l)		<0.010	<0.010	<0.010	<0.010	0.040
Phosphorus	(mg/l)		0.074	0.050	0.337	0.317	0.446
Phosphorus (Dissolved)	(mg/l)		0.072	<0.020	0.235	0.235	<0.020
Sulfate	(mg/l)	400	84	54	48	46	50
Sulfide	(mg/l)		<0.05	<0.05	<0.05	<0.05	0.46S
Total dissolved solids (TDS)	(mg/l)		603	632	606	612	490
Total Organic Carbon	(mg/l)		1.1	0.9J	0.6J	0.5J	3.5
Total suspended solids	(mg/l)		14	16	19	18	156

See Notes at End of Table

Table 9
 Summary of Groundwater Analytical Results
 General Chemistry and Natural Attenuation Parameters
 January 2007
 The Hartford Working Group / Hartford, Illinois
 1190505040 -- Madison County -- ILR000128249

PERIOD: From 01/15/2007 thru 01/17/2007 - Inclusive

SAMPLE TYPE: Water

CONSTITUENT	SITE	COMPARISON	HMW-49B	HMW-49C	HMW-49D	HMW-50A	HMW-50B
	SAMPLE ID		HMW-49B/070115	HMW-49C/070116	HMW-49D/070116	HMW-50A/070116	HMW-50B/070115
	DATE	RESULT TYPE	01/15/2007	01/16/2007	01/16/2007	01/16/2007	01/15/2007
		VALUE	Primary	Primary	Primary	Primary	Primary
Alkalinity (as CaCO ₃)	(mg/l)		746	504	534	408	293
Ammonia (as N)	(mg/l)		<0.10	0.07J	0.15	<0.10	1.53
Chloride	(mg/l)	200	457S	8	45	15	408
COD	(mg/l)		64	145	26	<20	55
Cyanide	(mg/l)	0.2	<0.007	<0.007	<0.007	<0.007	<0.007
Hardness (as CaCO ₃)	(mg/l)		1080	440	560	630	1010
Nitrate (as N)	(mg/l)	10	<0.050	0.028J	<0.050	3.53	0.922
Nitrate Plus Nitrite (as N)	(mg/l)		<0.050	0.032J	<0.050	3.54	0.922
Nitrite (as N)	(mg/l)		<0.010	<0.010	<0.010	<0.010	<0.010
Phosphorus	(mg/l)		0.659	0.443	0.502	0.205	0.305
Phosphorus (Dissolved)	(mg/l)		0.624	0.258	0.620	0.169	0.077
Sulfate	(mg/l)	400	47S	<40	55	279	392
Sulfide	(mg/l)		0.40	0.87S	0.08	0.04JS	0.03J
Total dissolved solids (TDS)	(mg/l)		1500	528	610	862	1550
Total Organic Carbon	(mg/l)		1.3	8.9	4.2	2.6	<1.0
Total suspended solids	(mg/l)		24	180	14	23	88

See Notes at End of Table

Table 9
 Summary of Groundwater Analytical Results
 General Chemistry and Natural Attenuation Parameters
 January 2007
 The Hartford Working Group / Hartford, Illinois
 1190505040 -- Madison County - ILR000128249

PERIOD: From 01/15/2007 thru 01/17/2007 - Inclusive

SAMPLE TYPE: Water

CONSTITUENT	SITE	SAMPLE ID	DATE	COMPARISON	HMW-50B	HMW-50C	HMW-52C	MP-81C	MP-89C
					DUP-002/0701115	HMW-50C/070116	HMW-52C/070117	MP-81C/070116	MP-89C/070116
RESULT TYPE	VALUE			Duplicate 1	Primary	Primary	Primary	Primary	Primary
Alkalinity (as CaCO ₃)	(mg/l)			285	568	610	584		368
Ammonia (as N)	(mg/l)			1.57	<0.48	0.13	0.16		0.17
Chloride	(mg/l)	200		385	439	40S	30		27
COD	(mg/l)			97	45	23	<20		48
Cyanide	(mg/l)	0.2		<0.007	<0.007	0.375	<0.007		<0.007
Hardness (as CaCO ₃)	(mg/l)			840S	770	780	700		880
Nitrate (as N)	(mg/l)	10		0.238	<0.050	0.010J	<0.050		<0.050
Nitrate Plus Nitrite (as N)	(mg/l)			0.241	<0.050	0.010J	<0.050		<0.050
Nitrite (as N)	(mg/l)			<0.010	<0.010	<0.010	<0.010		<0.010
Phosphorus	(mg/l)			0.388	0.438	0.429	<0.020		0.715
Phosphorus (Dissolved)	(mg/l)			0.081	0.748	0.148	<0.020		0.267
Sulfate	(mg/l)	400		375	89	127	142		591
Sulfide	(mg/l)			0.12S	4.9	0.51S	<0.05		0.26S
Total dissolved solids (TDS)	(mg/l)			1500	1290	866	854		1160
Total Organic Carbon	(mg/l)			<1.0S	1.0J	1.8	1.7		8.2
Total suspended solids	(mg/l)			104	132	632	56		208

See Notes at End of Table

Table 9
Summary of Groundwater Analytical Results
General Chemistry and Natural Attenuation Parameters
January 2007
The Hartford Working Group / Hartford, Illinois
1190505040 -- Madison County -- ILR000128249

PERIOD: From 01/15/2007 thru 01/17/2007 - Inclusive

SAMPLE TYPE: Water

CONSTITUENT	SITE	MP-92D
	SAMPLE ID	MP-92D/070116
	DATE	COMPARISON
	RESULT TYPE	VALUE
		Primary
Alkalinity (as CaCO ₃)	(mg/l)	604
Ammonia (as N)	(mg/l)	<0.10
Chloride	(mg/l)	200
COD	(mg/l)	10
Cyanide	(mg/l)	0.2
Hardness (as CaCO ₃)	(mg/l)	720
Nitrate (as N)	(mg/l)	10
Nitrate Plus Nitrite (as N)	(mg/l)	<0.050
Nitrite (as N)	(mg/l)	0.010
Phosphorus	(mg/l)	0.091
Phosphorus (Dissolved)	(mg/l)	0.028
Sulfate	(mg/l)	400
Sulfide	(mg/l)	0.10S
Total dissolved solids (TDS)	(mg/l)	898
Total Organic Carbon	(mg/l)	1.1
Total suspended solids	(mg/l)	44

See Notes at End of Table



NOTES

TABLES 7, 8 and 9

Comparison values are Tier 1 Class 1 Groundwater Remediation Objectives from Illinois EPA's Tiered Approach to Corrective Action Objectives (35 IAC Part 742). Groundwater quality values listed in 35 IAC Part 742 used for comparison purposes only.

mg/L = Milligrams per liter.

µg/L = Micrograms per liter.

J = Estimated value. Compound detected below the practical quantitation limit (PQL).

R = RPD outside accepted recovery limits.

S = Spike Recovery outside of accepted recovery limits.

NA = Constituent not analyzed by laboratory.

TABLE 10
Indicator Parameters - January 2007 Quarterly Sampling
The Hartford Area Hydrocarbon Plume Site

1190505040 -- Madison County -- ILR000128249
 The Hartford Working Group / Hartford, Illinois

Well Number	Date	Temperature °C	pH (std. units)	Conductivity (umhos/cm)	Turbidity (ntu)	Dissolved Oxygen (mg/L)	ORP (mV)
FIRST QUARTER 2007							
HMW-25	01/15/07	14.0	6.71	1180	0.39	0.64	220
HMW-26	01/15/07	14.8	6.65	1719	18.0	0.40	-91.2
HMW-27	01/15/07	14.9	6.65	1098	8.20	0.43	4.78
HMW-28	01/15/07	14.2	6.71	933	1.46	0.63	140
HMW-29	01/16/07	14.5	6.70	810	13.8	0.53	-62.9
HMW-39B	01/15/07	12.1	7.82	643	NM	6.00	--
HMW-39C	01/15/07	14.1	7.14	1167	10.5	0.45	-91.1
HMW-40C	01/16/07	15.2	6.36	699	565	0.48	10.5
HMW-49B	01/15/07	14.3	6.91	2090	NM	6.25	--
HMW-49C	01/16/07	14.9	6.61	772	17.3	5.04	-6.02
HMW-49D	01/16/07	15.5	6.64	920	31.4	3.23	-69.1
HMW-50A	01/16/07	14.2	6.17	948	17.1	2.76	44.6
HMW-50B	01/15/07	12.9	6.71	3120	NM	7.80	--
HMW-50C	01/16/07	12.2	6.74	1728	4.08	0.33	-277
HMW-52C	01/17/07	13.7	6.69	1061	664	0.68	-71.7
MP-81C	01/16/07	14.2	6.61	1046	9.00	0.84	86.3
MP-89C	01/16/07	14.8	6.69	1293	856	0.90	-76.0
MP-92D	01/16/07	14.7	6.62	1176	54.7	0.87	-37.2

NOTES:

°C = degrees Celcius

ntu = nephelometric turbidity units

-- = No data collected.

NM = Not Measured



APPENDIX A

MONITORING WELL INSPECTION REPORT

EXISTING WELL INTEGRITY SURVEY FORM

PROJECT INFORMATION

Project Name: HWIG
 Project No.: D71003-003095-117-001

Date(s) of Inspection: 11/3/07
 Field Personnel: J Radcliff, S Mirele

WELL INTEGRITY INFORMATION

Well ID	Static Levels		Well Casing Diameter (Inches)	Security	Protective Cover	Flush Mount	Concrete Pad	Bumper Posts	Grade/Slope												
	Depth to Product (FT BTOS)	Depth to Water (FT BTOS)								Well Secured/Locked	Well Cap Present	Present	Intact	Dented	Present	Intact	Cracked	Rubber Seal Present	Present	Intact	Cracked
HWIG-54A	NE	NE	15.89	1" PVC	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
HWIG-54B	33.27	34.66	N/A	1" PVC	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
HWIG-54C	NE	33.62	N/A	2" PVC	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
MP-97A	NE	NE	41.78	1"	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
MP-97B	NE	15.58	N/A	1"	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
MP-97C	NE	NE	33.72	1"	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
MP-97D	33.09	34.73	N/A	1"	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
MP-97E	NE	5.08	N/A	1"	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
MP-97F	NE	NE	14.56	1"	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
MP-96C	NE	33.57	N/A	1"	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
MP-96D	33.26	34.38	N/A	1"	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
MP-96A	NE	NE	4.66	1"	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
MP-96B	NE	NE	15.29	1"	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
MP-96C	NE	NE	23.79	1" ✓	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y

ADDITIONAL COMMENTS: MP-97B & C Caps would NOT tighten down on wells. See

EXISTING WELL INTEGRITY SURVEY FORM

PROJECT INFORMATION

Project Name: HWG

Project No.: 07003-003095.17-001

Date(s) of Inspection:

11/9/06

Field Personnel: A. Riddatt / S. Marlo

WELL INTEGRITY INFORMATION

Well ID	Static Levels			Well Casing Diameter (inches)	Material	Well Secured/Locked	Security	Protective Cover	Flush Mount	Concrete Pad	Bumper Posts	Grade/Slope	Additional Comments Below												
	Depth to Product (FT BTOC)	Depth to Water (FT BTOC)	Total Well Depth (FT BTOC)											Present	Intact	Cracked	Rubber Seal Present	Present	Intact	Cracked	Shifted Out of Place	Intact	Bent	Missing	Away From Well
MP-57A	NE	NE	14.79	1"	PVC	Y	Y	Y Y N	Y Y N Y	Y Y N N	-	-	-	-	-	-	-	Y Y N	Y Y N	Y Y N	Y Y N	Y Y N	Y Y N	Y Y N	✓
MP-57B	NE	NE	24.29	1"	1	Y	Y	Y Y N	Y Y N Y	Y Y N N	-	-	-	-	-	-	-	Y Y N	Y Y N	Y Y N	Y Y N	Y Y N	Y Y N	Y Y N	
MP-57C	32.85	33.96	N/A	2"	1	Y	Y	Y Y N	Y Y N Y	Y Y N N	-	-	-	-	-	-	-	Y Y N	Y Y N	Y Y N	Y Y N	Y Y N	Y Y N	Y Y N	
MP-13S	NE	NE	9.12	1"	1	Y	Y	Y Y N	Y Y N Y	Y Y N N	-	-	-	-	-	-	-	Y Y N	Y Y N	Y Y N	Y Y N	Y Y N	Y Y N	Y Y N	✓
MP-13D	NE	NE	27.68	1"	1	Y	Y	Y Y N	Y Y N Y	Y Y N N	-	-	-	-	-	-	-	Y Y N	Y Y N	Y Y N	Y Y N	Y Y N	Y Y N	Y Y N	✓
MP-14S	NE	NE	9.32	1"	1	Y	Y	Y Y N	Y Y N Y	Y Y N N	-	-	-	-	-	-	-	Y Y N	Y Y N	Y Y N	Y Y N	Y Y N	Y Y N	Y Y N	
MP-14D	NE	26.82	N/A	1"	1	Y	Y	Y Y N	Y Y N Y	Y Y N N	-	-	-	-	-	-	-	Y Y N	Y Y N	Y Y N	Y Y N	Y Y N	Y Y N	Y Y N	
MP-15S	NE	NE	9.45	1"	1	Y	Y	Y Y N	Y Y N Y	Y Y N N	-	-	-	-	-	-	-	Y Y N	Y Y N	Y Y N	Y Y N	Y Y N	Y Y N	Y Y N	✓
MP-15D	NE	26.47	N/A	1"	1	Y	Y	Y Y N	Y Y N Y	Y Y N N	-	-	-	-	-	-	-	Y Y N	Y Y N	Y Y N	Y Y N	Y Y N	Y Y N	Y Y N	✓
MP-16S	NE	NE	9.78	1"	1	Y	Y	Y Y N	Y Y N Y	Y Y N N	-	-	-	-	-	-	-	Y Y N	Y Y N	Y Y N	Y Y N	Y Y N	Y Y N	Y Y N	
MP-16D	NE	27.60	N/A	1"	1	Y	Y	Y Y N	Y Y N Y	Y Y N N	-	-	-	-	-	-	-	Y Y N	Y Y N	Y Y N	Y Y N	Y Y N	Y Y N	Y Y N	
MP-60A	NE	NE	9.69	1"	1	Y	Y	Y Y N	Y Y N Y	Y Y N N	-	-	-	-	-	-	-	Y Y N	Y Y N	Y Y N	Y Y N	Y Y N	Y Y N	Y Y N	
MP-60B	NE	NE	20.70	1"	1	Y	Y	Y Y N	Y Y N Y	Y Y N N	-	-	-	-	-	-	-	Y Y N	Y Y N	Y Y N	Y Y N	Y Y N	Y Y N	Y Y N	
MP-60C	32.72	34.13	N/A	2"	1	Y	Y	Y Y N	Y Y N Y	Y Y N N	-	-	-	-	-	-	-	Y Y N	Y Y N	Y Y N	Y Y N	Y Y N	Y Y N	Y Y N	

ADDITIONAL COMMENTS:

MP-57A: PVC cap wont seal.

MP-13S + 13D: Screws stripped

MP-15S + 15D: missing screws

EXISTING WELL INTEGRITY SURVEY FORM

PROJECT INFORMATION

Project Name: HUCS
Project No.: 01003-003095, 17-001

Date(s) of Inspection: 11/9/06
Field Personnel: A. Baddatz, J.S. Mazzola

WELL INTEGRITY INFORMATION

Well ID	Static Levels		Total Well Depth (FT BTOS)	Diameter (Inches)	Material	Well Casing	Security	Protective Cover	Flush Mount	Concrete Pad	Bumper Posts	Grade/Slope						
	Depth to Product (FT BTOS)	Depth to Water (FT BTOS)																
MP-58A	NE	NE	10.03	1"	PVC	Y	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	-
MP-58B	NE	NE	21.18	1"	Y	Y	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	-
MP-58C	33.88	34.03	N/A	2"	Y	Y	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	-
MP-59A	N/A	NE	9.32	1"	Y	Y	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	-
MP-59B	70.24	NE	17.86	1"	Y	Y	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	-
MP-59C	33.12	34.41	N/A	2"	Y	Y	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	-
MP-88A	NE	NE	9.84	1"	Y	Y	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	-
MP-88B	NE	NE	19.71	1"	Y	Y	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	-
MP-88C	33.76	34.02	N/A	2"	Y	Y	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	-
MP-95A	NE	NE	9.66	1"	Y	Y	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	-
MP-95B	NE	16.69	N/A	1"	Y	Y	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	-
MP-64A	NE	9.61	N/A	1"	Y	Y	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	-
MP-64B	NE	21.31	N/A	1"	Y	Y	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	-
MP-64C	31.76	33.26	N/A	2"	Y	Y	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	-
ADDITIONAL COMMENTS:																		

EXISTING WELL INTEGRITY SURVEY FORM

PROJECT INFORMATION

Project Name: HWW Date(s) of Inspection: i-9-06
 Project No.: 07003-003095, M17 -001 Field Personnel: A. Raddatz / S. Marlo

WELL INTEGRITY INFORMATION

Well ID	Static Levels			Well Casing	Security	Protective Cover	Flush Mount	Concrete Pad	Bumper Posts	Grade/Slope																
	Depth to Product (FT BTOC)	Depth to Water (FT BTOC)	Total Well Depth (FT BTOC)								Diameter (Inches)	Material	Well Secured/Locked	Well Cap Present	Present	Intact	Cracked	Rubber Seal Present	Present	Intact	Bent	Missing	Away From Well	Facilities Access	Standing Water	Additional Comment(s) Below
HWW-27	NM	34.40	NA	2"	PVC	Y	Y	Y	Y	N	Y	Y	N	Y	Y	N	Y	Y	N	N	NA	NA	NA	Y	Y	N
MP-65A	NM	16.20	NA	1"																						
MP-65B	NM	NE	24.75	1"																						
MP-65C	NM	33.85	NA	2"																						
MP-67A	NM	25.38	NA	1"																						
MP-67B	NM	9.86	NA	1"																						
MP-67C	NM	33.30	NA	2"																						
78HWW-28	NM	33.38	NA	2"																						
MP-66A	NM	34.23	NA	1"																						
MP-66B	NM	25.16	NA	1"																						
MP-66C	NM	33.38	NA	2"																						
79HWW-29	NM	32.55	NA	2"																						
ADDITIONAL COMMENTS:																										
MP-67C: missing screw																										

EXISTING WELL INTEGRITY SURVEY FORM

PROJECT INFORMATION

Project Name: Hw6
 Project No.: 07003 - 003095.17.001 Date(s) of Inspection: 11/01/07
 Field Personnel: Scott Hoppel, Nick Dennis (PS)

WELL INTEGRITY INFORMATION

Well ID	Static Levels			Well Casing	Security	Protective Cover	Flush Mount	Concrete Pad	Bumper Posts	Grade/Slope	Additional Comment(s) Below				
	Depth to Product (FT BTOC)	Depth to Water (FT BTOC)	Total Well Depth (FT BTOC)									Intact	Cracked	Rubber Seal Present	Present
MP-31A				1"	PVC	N Y	Y Y N	Y Y N	Y Y Y N N	NA NA NA	Y Y N	I,3			
MP-31B				1"		N Y	Y Y N	Y Y N	Y Y Y N N		Y Y N	I			
MP-31C				2"		N Y	Y Y N	Y Y N	Y Y Y N N		Y Y N	I			
MP-32A				1"		N Y	Y Y N	Y Y N	Y Y Y N N		Y Y N	I			
MP-32B				1"		N Y	Y Y N	Y Y N	Y Y Y N N		Y Y N	I			
MP-32C				2"		Y Y	Y Y N	Y Y N	Y Y Y N N		Y Y N				
MP-35A				1"		Y Y	Y Y N	Y Y N	Y Y Y N N		Y Y N	Z			
MP-35B				1"		Y Y	Y Y N	Y Y N	Y Y Y N N		Y Y N	Z			
MP-35C				1"		Y Y	Y Y N	Y Y N	Y Y Y N N		Y Y N				
MP-35D				2"		Y Y	Y Y N	Y Y N	Y Y Y N N		Y Y N				
MP-34A				1"		Y Y	Y Y N	Y Y N	Y Y Y N N		Y Y N				
MP-34B				1"		Y Y	Y Y N	Y Y N	Y Y Y N N		Y Y N				
MP-34C				2"		Y Y	Y Y N	Y Y N	Y Y Y N N	++	Y Y N				
SET APR-36A															

ADDITIONAL COMMENTS: (1) No lock (2) Bolt ear broken off (3) Bolts stripped

EXISTING WELL INTEGRITY SURVEY FORM

PROJECT INFORMATION

Project Name: HWG Date(s) of Inspection: 11/10/07
 Project No.: 07003-003C95.17.00 Field Personnel: Scott Hoppel, Nick Dennis (PS)

WELL INTEGRITY INFORMATION

Well ID	Static Levels			Well Casing Diameter (Inches) Material	Security Well Secured/Locked	Protective Cover Present Intact Dented	Flush Mount Present Intact Cracked	Concrete Pad Rubber Seal Present Present Intact Cracked Shifted Out of Place	Bumper Posts Intact Bent Missing	Grade/Slope Away From Well Facilities Access Standing Water	Additional Comment(s) Below
	Depth to Product (FT BTOC)	Depth to Water (FT BTOC)	Total Well Depth (FT BTOC)								
MP-36B				1" PVC	Y Y Y N	Y Y N Y	Y Y N N	NADA NADA NADA	Y Y N		Z
MP-36C				2"	Y Y Y Y N	Y Y N Y	Y Y N N		Y Y N		
Hmw-18				2"	Y Y Y Y N	Y Y N Y	Y Y N N		Y Y N		
MP-39A				1"	Y Y Y Y N	Y Y N Y	Y Y N N		Y Y N		
MP-39B				1"	Y Y Y Y N	Y Y N Y	Y Y N N		Y Y N		
MP-39C				2"	Y Y Y Y N	Y Y N Y	Y Y N N		Y Y N		
MP-39A				1"	Y Y Y Y N	Y Y N Y	Y Y N N		Y Y N		
MP-39B				1"	Y Y Y Y N	Y Y N Y	Y Y N N		Y Y N		
MP-39C				2"	Y Y Y Y N	Y Y N Y	Y Y N N		Y Y N		
Hmw-40A				2"	Y Y Y Y N	Y Y N Y	Y Y N N		Y Y N		
Hmw-40B				2"	N Y Y Y N	Y Y N Y	Y Y N N		Y Y N		
Hmw-40C				2"	Y Y Y Y N	Y Y N Y	Y Y N N		Y Y N		
MP-43A+B				1"	N Y Y Y N	Y Y N Y	Y Y Y N	↓↓↓	Y Y N		1.3
MP-43B				1"	→						

ADDITIONAL COMMENTS: (1) No lock (2) Bolt ear broken off (3) Bolts stripped *

Hmw-40A → labeled MP-40A on flushmount lid

EXISTING WELL INTEGRITY SURVEY FORM										
PROJECT INFORMATION										
Project Name:		The Herkfeld Waterline Survey		Date(s) of Inspection:		11/01/07		Field Personnel:		
FIELD INTEGRITY INFORMATION										
Well ID	Static Levels	Well Casing	Security	Flush Mount	Protective Cover	Bumper Posts	Grade/Slope	Bent	Away From Well	Additional Comment(s)
HMW-49A	N/E	PVC	Y	Y	Y	Y	Y	Missing	Away From Well	Standing Water Below
HMW-49B	N/E	PVC	Y	Y	Y	Y	Y	Intact	Intact	Intact
HMW-49C	N/E	PVC	Y	Y	Y	Y	Y	Cracked	Cracked	Cracked
HMW-49D	N/E	PVC	Y	Y	Y	Y	Y	Dented	Shifted Out of Place	Rubber Seal Present
HMW-49E	E3, 13	PVC	Y	Y	Y	Y	Y	Present	Present	Well Cap Present
HMW-49F	N/E	PVC	Y	Y	Y	Y	Y	Intact	Intact	Well Secured/Locked
HMW-49G	N/E	PVC	Y	Y	Y	Y	Y	Present	Present	Product (FT BT0C)
HMW-49H	N/E	PVC	Y	Y	Y	Y	Y	Intact	Intact	Total Well Depth (FT BT0C)
HMW-49I	N/E	PVC	Y	Y	Y	Y	Y	Cracked	Cracked	Depth to Water (FT BT0C)
HMW-49J	N/E	PVC	Y	Y	Y	Y	Y	Dented	Dented	Material
HMW-49K	N/E	PVC	Y	Y	Y	Y	Y	Present	Present	Additional COMMENTS:
HMW-49L	NE	PVC	Y	Y	Y	Y	Y	Intact	Intact	MP-71
HMW-49M	NE	PVC	Y	Y	Y	Y	Y	Cracked	Cracked	MP-72
HMW-49N	NE	PVC	Y	Y	Y	Y	Y	Dented	Dented	HMW-49C
HMW-49O	NE	PVC	Y	Y	Y	Y	Y	Present	Present	HMW-49B
HMW-49P	NE	PVC	Y	Y	Y	Y	Y	Intact	Intact	HMW-49A
HMW-49Q	NE	PVC	Y	Y	Y	Y	Y	Cracked	Cracked	HMW-49D
HMW-49R	NE	PVC	Y	Y	Y	Y	Y	Dented	Dented	MP-73
HMW-49S	NE	PVC	Y	Y	Y	Y	Y	Present	Present	MP-74

EXISTING WELL INTEGRITY SURVEY FORM

Project Name: The Hartfield Water Well Group
 Project No.: 07003 - 003095.17-QB1
 Date(s) of Inspection: 11/16/07
 Field Personnel: J. Laug A. Radatz

WELL INTEGRITY INFORMATION

EXISTING WELL INTEGRITY SURVEY FORM											
Well ID	PROJECT INFORMATION										
	Static Levels	Well Casing	Well Security	Protective Cover	Bumpers	Grade/Slope	Bumps	Posts	Flush Mount	Concrete Pad	Well Cap Present
MP-78D	Y	YY	Y	Y	Y	Y	Y	Y	Y	Y	Present
MP-79A	Y	YY	Y	Y	Y	Y	Y	Y	Y	Y	Intact
MP-79B	Y	YY	Y	Y	Y	Y	Y	Y	Y	Y	Cracked
MP-79C	Y	YY	Y	Y	Y	Y	Y	Y	Y	Y	Shifted Out of Place
HB-31	Y	YY	Y	Y	Y	Y	Y	Y	Y	Y	Present
MP-80A	Y	YY	Y	Y	Y	Y	Y	Y	Y	Y	Present
MP-80B	Y	YY	Y	Y	Y	Y	Y	Y	Y	Y	Present
MP-80C	Y	YY	Y	Y	Y	Y	Y	Y	Y	Y	Present
MP-80D	Y	YY	Y	Y	Y	Y	Y	Y	Y	Y	Present
MP-80A	Y	YY	Y	Y	Y	Y	Y	Y	Y	Y	Present
MP-80C	Y	YY	Y	Y	Y	Y	Y	Y	Y	Y	Present
MP-80D	Y	YY	Y	Y	Y	Y	Y	Y	Y	Y	Present
MP-80A	Y	YY	Y	Y	Y	Y	Y	Y	Y	Y	Present
MP-80C	Y	YY	Y	Y	Y	Y	Y	Y	Y	Y	Present
MP-80D	Y	YY	Y	Y	Y	Y	Y	Y	Y	Y	Present
MP-83A	Y	YY	Y	Y	Y	Y	Y	Y	Y	Y	Present
MP-83B	Y	YY	Y	Y	Y	Y	Y	Y	Y	Y	Present
MP-83C	Y	YY	Y	Y	Y	Y	Y	Y	Y	Y	Present
ADDITIONAL COMMENTS:											

EXISTING WELL INTEGRITY SURVEY FORM

PROJECT INFORMATION

Project Name: The Hartford Working Group
 Project No.: 07003-003095.17-0010

Date(s) of Inspection: 1/10/07
 Field Personnel: J. Long & A. Radcliffe

WELL INTEGRITY INFORMATION

Well ID	Static Levels			Well Casing	Diameter (Inches)	Material	Security		Protective Cover		Flush Mount		Concrete Pad		Bumper Posts		Grade/Slope		Additional Comment(s) Below				
	Depth to Product (FT BTOC)	Depth to Water (FT BTOC)	Total Well Depth (FT BTOC)				Well Secured/Locked	Well Cap Present	Present	Intact	Dented	Present	Intact	Cracked	Rubber Seal Present	Present	Intact	Cracked	Shifted Out of Place	Intact	Bent	Away From Well	Facilitates Access
MP-83C				2	PVC	Y	Y	Y	/	/	/	Y	Y	N	Y	Y	Y	N	N	/	Y	Y	N
HMW-39A				2	PVC	Y	Y	Y	/	/	/	Y	Y	N	Y	Y	Y	N	N	/	Y	Y	N
HMW-39B				2	PVC	Y	Y	Y	/	/	/	Y	Y	N	Y	Y	Y	N	N	/	X	Y	N
HMW-39C				2	PVC	Y	Y	Y	/	/	/	Y	Y	N	Y	Y	Y	N	N	/	Y	Y	N

ADDITIONAL COMMENTS:

EXISTING WELL INTEGRITY SURVEY FORM

PROJECT INFORMATION

Project Name: *Haus*
Project No.: *2203-003055.12-061*

Date(s) of Inspection: *1-5-17*
Field Personnel: *J. Scott / Tracy Egan*

WELL INTEGRITY INFORMATION

Well ID	Static Levels						Well Casing Diameter (Inches)	Security Material	Protective Cover	Flush Mount	Concrete Pad	Bumper Posts	Grade/Slope							
	Depth to Product (FT BTOC)	Depth to Water (FT BTOC)	Total Well Depth (FT BTOC)																	
				Well Secured/Locked	Well Cap Present	Present														
HP-04A	NM	3304	2"	MC	Yes	Yes	-	-	-	Yes	Yes	No	Yes	Intact						
HP-04B	NM	3300	2"	MC	Yes	Yes	-	-	-	Yes	Yes	No	Yes	Cracked						
HP-04C	NM	3304	2"	MC	Yes	Yes	-	-	-	Yes	Yes	No	Yes	Rubber Seal Present						
														Present						
														Intact						
														Cracked						
														Shifted Out of Place						
														Intact						
														Bent						
														Missing						
														Away From Well						
														Facilitates Access						
														Standing Water						
														Additional Comment(s) Below						

ADDITIONAL COMMENTS: *Boats shipped*

EXISTING WELL INTEGRITY SURVEY FORM

PROJECT INFORMATION

Project Name: Quarterly groundwater gurgling Date(s) of Inspection: 1/9/07
 Project No.: C7003-003095-17-001 Field Personnel: Nick Dennis John Lieneman

WELL INTEGRITY INFORMATION

Well ID	Static Levels			Well Casing	Security	Protective Cover	Flush Mount	Concrete Pad	Bumper Posts	Grade/Slope	Away From Well	Facilitates Access	Standing Water	Additional Comment(s) Below				
	Depth to Product (FT BTOC)	Depth to Water (FT BTOC)	Total Well Depth (FT BTOC)															
HWW-44A	N.m.	16.12		2 PVC	Y	Y	Y	Y	N	Y	Y	Y	Y	Y	N	N	✓	
HWW-44B	N.m.	23.41		2 PVC														✓
HWW-44C	32.16	33.97		2 PVC														
HWW-44D	N.m.	33.98		2 PVC														
MP-55A	N.m.	16.89		1 PVC														
MP-55B	N.m.	23.89		1 PVC														
MP-55C																		
HWW-30	34.55	35.31		2 PVC	Y	Y	Y	Y	N	Y	Y	Y	Y	Y	N	N		
MP-56A	N.m.	10.96		1 PVC	Y	Y									N			
MP-56B	N.m.	N.m.	27.91	1 PVC	Y	Y									N			
MP-56C	N.m.	33.98		2 PVC	Y	Y									V			
MP-77A	N.m.	N.m.	10.50	1														
MP-77B	N.m.	24.58		1														
MP-77C	33.89	34.95		2														✓

ADDITIONAL COMMENTS: HWW-44A, 44B: 1 bolt missing, MP-77C: 2 bolts missing

EXISTING WELL INTEGRITY SURVEY FORM

PROJECT INFORMATION

Project Name: Quarterly groundwater gauging
 Project No.: 07003-00309517-001

Date(s) of Inspection: 11/9/07

Field Personnel: Nick Dennis, John Linnerman

WELL INTEGRITY INFORMATION

Well ID	Static Levels			Well Casing	Security	Protective Cover	Flush Mount	Concrete Pad	Bumper Posts	Grade/Slope			
	Depth to Product (FT BTOC)	Depth to Water (FT BTOC)	Total Well Depth (FT BTOC)							Present	Intact	Dented	Away From Well
													Facilitates Access
MP-52A	00.m.	00.m.	10,00	1	PVC	Y	Y	Y	Y	N	Y	Y	N
MP-52B	00.m.	00.m.	22,65	1	PVC					N			
MP-52C	34.57	34.60		2	PVC					N			
MP-53A	00.m.	11.69		1	PVC					Y			
MP-53B	00.m.	00.m.	24.51	1	PVC					Y			
MP-53C	34.33	34.90		2	PVC					N			
HB-37	00.m.	35.72		2	PVC				NA	NA	NA	NA	NA
MP-54A	00.m.	00.m.	12.47	1	PVC				Y	Y	N	Y	Y
MP-54B	00.m.	00.m.	24.40	1	PVC					N			
MP-54C	33.74	35.30		2	PVC					N			
HB-30	34.80		35.05	2	PVC				NA	NA	NA	NA	NA
MP-51A	00.m.	00.m.	9.80	2	PVC				N	Y	Y	Y	Y
MP-51B	00.m.	00.m.	15.00	1	PVC								
MP-51C	00.m.	00.m.	24.63	1	PVC								

ADDITIONAL COMMENTS: _____

EXISTING WELL INTEGRITY SURVEY FORM

Project Name:	Clayton Group Services, Inc.	Date(s) of Inspection:	11/9/07	Field Personnel:	John Lininger
Project No.:	07003-003095.17-001				
WELL INTEGRITY INFORMATION					

Well ID	WELL INTEGRITY INFORMATION					
	Static Levels	Well Casings	Protective Cover	Flush Mount	Concrete Pad	Bumper
MP-5C4	10' m., N.m.	9.85	2	PVC	Y Y N N	Y Y Y Y N
MP-5C5	10' m.	12.175	2	PVC	N	N
MP-5C6	N.m.	23.65	1	PVC	N	N
MP-454	10' m.	13.175	2	PVC	Y	Y
MP-455	10' m.	23.65	1	PVC	Y	Y
MP-456	10' m.	24.115	1	PVC	Y	Y
MP 464	10' m.	19.70	2	PVC	N	N
MP 465	10' m.	24.115	1	PVC	N	N
MP 466	10' m.	33.28	3	PVC	Y	Y
MP 467	10' m.	34.41	3	PVC	Y	Y

ADDITIONAL COMMENTS: MP 50A,B,C ; ENSA Tinsdauer , well 46C : lift missing

EXISTING WELL INTEGRITY SURVEY FORM

PROJECT INFORMATION

Project Name: Quarterly Groundwater Sampling
Project No.: 07003-003-095-17-001

Date(s) of Inspection: 1/19/07
Field Personnel: Nick Dennis, John Zimmerman

WELL INTEGRITY INFORMATION

Well ID	Static Levels		Well Casing Diameter (Inches)	Material	Well Secured/Locked	Security	Protective Cover	Flush Mount	Concrete Pad	Bumper Posts	Grade/Slope
	Depth to Product (FT BTOC)	Depth to Water (FT BTOC)									
MP 47A			1	PVC	Y	Y	N	Y	Y	N	N
MP 47B			1	PVC	Y	Y	N	Y	Y	N	N
MP 47C			2	PVC	Y	Y	N	Y	Y	N	N
TEPA - 4			2	PVC	Y	Y	N	Y	Y	N	N
HmW - 01			2	PVC	Y	Y	N	Y	Y	N	N
HmW - 02			2	PVC	Y	Y	N	Y	Y	N	N
HmW - 09			2	PVC	Y	Y	N	Y	Y	N	N
HmW - 10			2	PVC	Y	Y	N	Y	Y	N	N
HmW - 34			2	PVC	Y	Y	N	Y	Y	N	N
MP - 25			1	PVC	Y	Y	N	Y	Y	N	N
MP - 108A			1	PVC	Y	Y	N	Y	Y	N	N
MP - 108B			1	PVC	Y	Y	N	Y	Y	N	N
MP - 108C			1	PVC	Y	Y	N	Y	Y	N	N
MP - 26			1	PVC	Y	Y	N	Y	Y	N	N

ADDITIONAL COMMENTS: HmW 34: 2 belts missing, MP 25: 1 bc it missing

EXISTING WELL INTEGRITY SURVEY FORM

PROJECT INFORMATION

Project Name: Groundwater Gauging (Quarterly)
 Project No.: 07003-003095, 17-001

Date(s) of Inspection: 1/9/07

Field Personnel: Nick Dennis, John Linneboom

WELL INTEGRITY INFORMATION

Well ID	Static Levels			Well Casing	Security	Protective Cover	Flush Mount	Concrete Pad	Bumper Posts	Grade/Slope	Additional Comments Below
	Depth to Product (FT BTOC)	Depth to Water (FT BTOC)	Total Well Depth (FT BTOC)								
Hmw - 35				2 PVC	Y Y Y Y N	Y Y N Y	Y Y N Y	Y Y N N			Y
Hmw - 36				2 PVC	Y Y Y Y N	Y Y N Y	Y Y N Y	Y Y N N			
MP - 27				1 PVC	Y Y Y Y N	Y Y N Y	Y Y N Y	Y Y N N			F
MP - 107A				1 PVC	Y Y Y Y N	Y Y N Y	Y Y N Y	Y Y N N			
MP - 107B				1 PVC							
MP - 107C				1 PVC							
MP - 28				1 PVC							
Hmw - 37				2 PVC							
MP - 106A				1 PVC	Y Y Y Y N	Y Y N Y	Y Y N Y	Y Y N N			
MP - 106B				1 PVC							
MP - 106C				1 PVC							
MP - 105A				1 PVC					N NA NA NA		
MP - 105B				1 PVC					N NA NA NA		
MP - 105C				1 PVC					N NA NA NA		

ADDITIONAL COMMENTS: Hmw 35: 1 bolt missing, MP 27: 1 bolt missing

EXISTING WELL INTEGRITY SURVEY FORM

PROJECT INFORMATION

Project Name: Quarterly Groundwater Sampling
 Project No.: 07003-063095-17-001

Date(s) of Inspection: 1/9/07

Field Personnel: Nick Dennis, John Linnemann

WELL INTEGRITY INFORMATION

Well ID	Static Levels			Well Casing	Diameter (Inches)	Material	Security Well Secured/Locked	Well Cap Present	Protective Cover Present	Flush Mount Intact	Cracked	Rubber Seal Present	Concrete Pad Present	Shifted Out of Place	Bumper Posts Intact	Grade/Slope Missing	Grade/Slope Away From Well	Additional Comment(s) Below	
	Depth to Product (FT BTOC)	Depth to Water (FT BTOC)	Total Well Depth (FT BTOC)																
MP-105 D				1	PVC		Y	Y	Y	N	Y	Y	N	Y	N	Y	NA	NA	
MP-105 E				1	PVC		Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	
RW-2				24	Steel		Y	Y	Y	N	NA	NA	NA	NA	NA	NA	NA	NA	
RW-5				4	PVC		Y	Y	Y	Y	N	Y	Y	N	N	Y	Y	N	
MP-42 A				1	PVC		Y	Y	Y	Y	N	Y	Y	N	Y	Y	Y	N	
MP-42 B				1	PVC		Y	Y	Y	Y	N	Y	Y	N	Y	Y	Y	N	
MP-41 A				1	PVC														
MP-41 B				1	PVC														
MP-41 C				2	PVC													Y	
HmW-13				2	PVC														
HmW-14				2	PVC														
HB-16				2	PVC						NA	NA	NA	NA	NA	NA	NA	NA	
MP-37 A				1	PVC						Y	Y	N	Y	Y	Y	U	U	
MP-37 B				1	PVC						Y	Y	U	Y	Y	Y	U	U	
ADDITIONAL COMMENTS: <u>MP 41 C : 1 bolt missing</u>																			

EXISTING WELL INTEGRITY SURVEY FORM

PROJECT INFORMATION

Project Name: Quarterly Groundwater Gauging Date(s) of Inspection: 1/9/07
 Project No.: 07002-003095.17-001 Field Personnel: Nick Dennis, John Linnemann

WELL INTEGRITY INFORMATION

Well ID	Static Levels			Well Casing	Security	Protective Cover	Flush Mount	Concrete Pad	Bumper Posts	Grade/Slope	Additional Comment(s) Below										
	Depth to Product (FT BTOC)	Depth to Water (FT BTOC)	Total Well Depth (FT BTOC)																		
MP-37C	25.53	25.54		2	PVC	Y	Y	Y	Y	N	Y	Y	Y	Y	Y	N	N				
MP-37D	32.09	34.37		2	PVC																
HB-33				2	PVC																
HMW-21	W.M.	24.62	24.26	3	PVC																Y
HMW-22	N.M.	34.02		2	PVC																
HB-32	W.M.	37.60		4	PVC						NA	NA	NA	NA	NA	NA	NA	NA	NA		
RW-3	N.M.	37.40		4	PVC	Y	Y	Y	Y	N	NA	NA	NA	NA	NA	NA	NA	NA	NA		
RW-4	N.M.	33.64		4	PVC	Y	Y	Y	Y	N	Y	Y	N	Y	Y	Y	Y	Y	Y		
RW-4A				4	PVC																
MP-5S	N.M.	N.M.		1	PVC						Y	Y	N	Y	Y	Y	Y	Y	N	N	
MP-5D	N.M.	24.29		1	PVC						Y	Y	N	Y	Y	Y	Y	Y	N	N	
MP-6S																					
MP-6D																					
MP-7S																					

ADDITIONAL COMMENTS: HMW 21,22: No bolts, RW 4: 1 bolt missing, MP 5S,5D: missing bolts

MP 6S,6D,7S: Not accessible

EXISTING WELL INTEGRITY SURVEY FORM

PROJECT INFORMATION

Project Name: Quarterly Groundwater Surveys
Project No.: 07003-003-095.17-001

Date(s) of Inspection: 1/9/07
Field Personnel: Kirk Dennis, John Linnehan

WELL INTEGRITY INFORMATION

Well ID	Static Levels		Well Casing Diameter (Inches) Material	Security	Protective Cover	Flush Mount	Concrete Pad	Bumper Posts	Grade/Slope													
	Depth to Product (FT BTOC)	Depth to Water (FT BTOC)								Well Secured/Locked	Well Cap Present	Present	Intact	Dented	Present	Intact	Cracked	Rubber Seal Present	Present	Intact	Cracked	
MP - 70			1 PVC 4"									Y	Y	N	Y	Y	Y	Y	Y	Y	Y	Y
MP - 85	10.0m	7.10	1 PVC 4"									Y	Y	N	Y	Y	Y	Y	Y	Y	Y	Y
MP - 80	10.0m	25.04	1 PVC 4"									Y	Y	N	Y	Y	Y	Y	Y	Y	Y	Y
MP - 95	10.0m	8.99	1 PVC									Y	Y	N	Y	Y	Y	Y	Y	Y	Y	Y
MP - 90	10.0m	23.78	1 PVC									Y	Y	N	Y	Y	Y	Y	Y	Y	Y	Y
Hmw - 30	34.07	34.87	2 PVC									Y	Y	N	Y	Y	Y	Y	Y	Y	Y	Y
Hmw - 31	34.08	34.95	2 PVC									Y	Y	N	Y	Y	Y	Y	Y	Y	Y	Y
Hmw - 32	34.03	34.63	2 PVC									Y	Y	N	Y	Y	Y	Y	Y	Y	Y	Y
Hmw - 33	34.05	35.16	2 PVC									Y	Y	N	Y	Y	Y	Y	Y	Y	Y	Y
Hmw - 07	10.0m	25.24	2 PVC									Y	Y	N	Y	Y	Y	Y	Y	Y	Y	Y
Hmw - 08	33.66	34.77	2 PVC									Y	Y	N	Y	Y	Y	Y	Y	Y	Y	Y
MP - 29A	10.0m	11.90	1 PVC									Y	Y	N	Y	Y	Y	Y	Y	Y	Y	Y
MP - 29B	10.0m	10.31	1 PVC									Y	Y	N	Y	Y	Y	Y	Y	Y	Y	Y
MP - 29C	10.0m	24.63	2 PVC									Y	Y	N	Y	Y	Y	Y	Y	Y	Y	Y

ADDITIONAL COMMENTS: MP 70: Not accessible, MP 80: PVC belt s, Hmw 30: PVC belts, Hmw 31: no belts

Hmw - 32, 33: PVC belts

EXISTING WELL INTEGRITY SURVEY FORM

PROJECT INFORMATION

Project Name: Quarterly Groundwater Gauging
 Project No.: 07003-003095,17-001

Date(s) of Inspection: 1/9/07

Field Personnel: Nick Dennis, John Lieneman

WELL INTEGRITY INFORMATION

Well ID	Static Levels			Well Casing	Security	Protective Cover	Flush Mount	Concrete Pad	Bumper Posts	Grade/Slope	Additional Comment(s) Below
	Depth to Product (FT BTOC)	Depth to Water (FT BTOC)	Total Well Depth (FT BTOC)								
MP- 29D	33.40	34.73		2 PVC	4' 4"	Y Y Y N	Y Y N N	Y Y N N			
MP - 85A	n.m.	10.16		1 PVC	1 1 1 1						
MP - 85B	n.m.	17.31		1 PVC							
MP - 85C	32.10	32.26		2 PVC							
MP - 85 D	n.m.	32.09		2 PVC							
HmW- 03	n.m.	30.87		2 PVC		NA NA NA			N		
HmW- 04	15.97	15.99		2 PVC	1 1	NA NA NA	1 1	1 N	1 1		
HmW- 48A	n.m.	n.m.	19.40	2 PVC	4' 4"	NA NA NA	Y Y N	Y Y N	Y Y N N		
HmW- 48B	n.m.	16.21		2 PVC							
HmW- 48C	31.50	31.83		2 PVC							
HmW-48D	n.m.	33.29		2 PVC							

ADDITIONAL COMMENTS: MP 85 A,B,C,D: all bolts stripped, HmW 48 A,B: bolts stripped, HmW 48 C,D: no bolts

EXISTING WELL INTEGRITY SURVEY FORM

PROJECT INFORMATION

Project Name: HWS Date(s) of Inspection: 1-9-07
 Project No.: XZ003-003015, 17-01 Field Personnel: T Gravel / Troy Eppinger

WELL INTEGRITY INFORMATION

Well ID	Static Levels			Well Casing	Security	Protective Cover	Flush Mount	Concrete Pad	Bumper Posts	Grade/Slope	Additional Comment(s) Below
	Depth to Product (FT BTOC)	Depth to Water (FT BTOC)	Total Well Depth (FT BTOC)								
HP-03A	NM	30.55		2"	PVC	YES YES	- - -	YES YES NO	YES YES NO NO	- - -	YES YES NO
03B	NM	30.56		2"		- - -	-			- - -	
03C	NM	30.39		2"		- - -	-			- - -	
02A	NM	31.02		2"		- - -	-			- - -	
01A	NM	26.90		2"		- - -	-			- - -	T
01B	NM	26.81		2"		- - -	-			- - -	
01C	NM	26.89		2"		- - -	-			- - -	
05A	NM	25.52		2"		- - -	-			- - -	
05B	NM	25.97		2"		- - -	-			- - -	
05C	NM	25.85		2"		- - -	-			- - -	
06A	NM	26.84		2"		- - -	-			- - -	
07A	NM	29.78		2"		- - -	-			- - -	
08A	NM	31.03		2"		- - -	-			- - -	
09A	NM	32.76		2"		- - -	-			- - -	

ADDITIONAL COMMENTS:

EXISTING WELL INTEGRITY SURVEY FORM

PROJECT INFORMATION

Project Name: HWG

Project No.: 07003.003045.17.001

Date(s) of Inspection: 1/10/07

Field Personnel: Scott Hoppel,

Nick Dennis (PSC)

WELL INTEGRITY INFORMATION

Well ID	Static Levels			Well Casing	Security	Protective Cover	Flush Mount	Concrete Pad	Bumper Posts	Grade/Slope	Additional Comment(s) Below
	Depth to Product (FT BTOC)	Depth to Water (FT BTOC)	Total Well Depth (FT BTOC)								
MP-43C				2"	PVC	N Y	Y Y N	Y Y N Y	Y Y N	N A N A N A	Y Y N 1
MP-10S				1"		Y Y	Y Y N	Y Y N Y	Y Y N N	1 1 1	Y Y N 3,4
MP-10D				1"		Y Y	Y Y N	Y Y N Y	Y Y N N		Y Y N 3
MP-11S				1"		Y Y	Y Y N	Y Y N Y	Y Y N N		Y Y N 3
MP-11D				1"		Y Y	Y Y N	Y Y N Y	Y Y N N		Y Y N
MP-12S				1"		Y Y	Y Y N	Y Y N Y	Y Y N N		Y Y N
MP-12D				1"		Y Y	Y Y N	Y Y N Y	Y Y N N		Y Y N
MP-4DA+B				1"		N Y	Y Y N	Y Y N Y	Y Y N N		Y Y N 1,3,4
MP-40C				2"		N Y	Y Y N	Y Y N Y	Y Y N N		Y Y N 1,4
MP-44A+B				1"		N Y	Y Y N	Y Y N Y	Y Y N N		Y Y N 1,3,4
MP-49C				2"		N Y	Y Y N	Y Y N Y	Y Y N N		Y Y N 1,3,4
HMW-19				2"		N Y	Y N N	N N N Y	Y Y N N		Y Y N *
MP-48A+B				1"		Y Y	Y Y N	Y Y N Y	Y Y N N		Y Y N
MP-48C				2"		Y Y	Y Y N	Y Y N Y	Y Y N N	*	Y Y N

ADDITIONAL COMMENTS: (1) No Lock (2) Bolt ear broken off (3) Bolts stripped (4) Bolt missing

* HMW-19 → Flush mount lid missing, barricade over well

EXISTING WELL INTEGRITY SURVEY FORM

PROJECT INFORMATION

Project Name: HWW
 Project No.: 07003-203C15, 17, 001

Date(s) of Inspection: 1/10/07
 Field Personnel: Scott Heppel, Nick Dennis (PSI)

WELL INTEGRITY INFORMATION

Well ID	Static Levels		Well Casing Diameter (Inches)	Material	Well Secured/Locked	Security	Protective Cover	Flush Mount	Concrete Pad	Bumper Posts	Grade/Slope	
	Depth to Product (FT BTOS)	Depth to Water (FT BTOS)										
HWW-51A			2" PVC	Y	Y	Y	N	Y	Y	N	NA NA NA	Y Y N
HWW-51B			2" PVC	Y	Y	Y	N	Y	Y	N	NA NA NA	Y Y N
HWW-51C			2" PVC	Y	Y	Y	N	Y	Y	N	NA NA NA	Y Y N
MP-42C			1" PVC	Y	Y	Y	N	Y	Y	N	NA NA NA	Y Y N
MP-42D			2" PVC	Y	Y	Y	N	Y	Y	N	NA NA NA	Y Y N
MP-41B			1" PVC	Y	Y	Y	N	Y	Y	N	NA NA NA	Y Y N
MP-41C			1" PVC	Y	Y	Y	N	Y	Y	N	NA NA NA	Y Y N
MP-41D			2" PVC	Y	Y	Y	N	Y	Y	N	NA NA NA	Y Y N
MP-40B			2" PVC	Y	Y	Y	N	Y	Y	N	NA NA NA	Y Y N
MP-40C			1" PVC	Y	Y	Y	N	Y	Y	N	NA NA NA	Y Y N
MP-41A+B			2" PVC	Y	Y	Y	N	Y	Y	N	NA NA NA	Y Y N
MP-44C			1" PVC	Y	Y	Y	N	Y	Y	N	NA NA NA	Y Y N
RW-1			2" PVC	Y	Y	Y	N	Y	Y	N	NA NA NA	Y Y N
MP-44A			36" Steel	Y	Y	NA NA NA	NA NA NA	NA NA NA	NA NA NA	NA NA NA	NA NA NA	Y Y N
ADDITIONAL COMMENTS: <u>① No lock</u> <u>② Bolt ears broken off</u> <u>③ Bolts stripped</u> <u>④ Bolt missing</u>												
<u>* RW-1 → lock fail, fence over locked</u>												

EXISTING WELL INTEGRITY SURVEY FORM

PROJECT INFORMATION

Project Name: HWG Date(s) of Inspection: 1/10/07
 Project No.: 07003 - 003095 17.00 Field Personnel: Scott Hoppel, Nick Dennis (ASC)

WELL INTEGRITY INFORMATION

Well ID	Static Levels			Well Casing	Security	Protective Cover	Flush Mount	Concrete Pad	Bumper Posts	Grade/Slope	Additional Comment(s) Below																	
	Depth to Product (FT BTOC)	Depth to Water (FT BTOC)	Total Well Depth (FT BTOC)									Diameter (Inches)	Material	Well Secured/Locked	Well Cap Present	Present	Intact	Dented	Present	Intact	Cracked	Rubber Seal Present	Present	Intact	Cracked	Shifted Out of Place	Intact	Bent
MP-49B				1"	PVC	N	#Y	Y	Y	N				Y	Y	N	Y	Y	Y	N	N	Y	Y	N	Y	Y	N	1
MP-49C				1"		N	#Y	Y	Y	N				Y	Y	N	Y	Y	Y	N	N	Y	Y	N	Y	Y	N	1
MP-100A				1"		N	#Y	Y	Y	N				Y	Y	N	Y	Y	Y	N	N	Y	Y	N	Y	Y	N	1.3
MP-100B				1"		N	#Y	Y	Y	N				Y	Y	N	Y	Y	Y	N	N	Y	Y	N	Y	Y	N	1
MP-100C				1"		N	#Y	Y	Y	N				Y	Y	N	Y	Y	Y	N	N	Y	Y	N	Y	Y	N	1
MP-100D				1"		N	#Y	Y	Y	N				Y	Y	N	Y	Y	Y	N	N	Y	Y	N	Y	Y	N	1
MP-82C				2"		N	Y	Y	Y	N				Y	Y	N	Y	Y	Y	N	N	Y	Y	N	Y	Y	N	1.3
MP-103A,B,C				1"		N	Y	Y	Y	N				Y	Y	N	Y	Y	Y	N	N	Y	Y	N	Y	Y	N	1
MP-104A,BC				1"		N	Y	Y	Y	N				Y	Y	N	Y	Y	Y	N	N	Y	Y	N	Y	Y	N	1
MP-81A+B				1"		N	Y	Y	Y	N				Y	Y	N	Y	Y	Y	N	N	Y	Y	N	Y	Y	N	1
MP-81C				2"		Y	Y	Y	Y	N				Y	Y	N	Y	Y	Y	N	N	Y	Y	N	N	Y	N	
MP-86A+B				1"		N	Y	Y	Y	N				Y	Y	N	Y	Y	Y	N	N	Y	Y	N	Y	Y	N	1.3
MP-86C				2"		Y	Y	Y	Y	N				Y	Y	N	Y	Y	Y	N	N	Y	Y	N	Y	Y	N	4
HMW-41A				2"		N	Y	Y	Y	N				Y	Y	N	Y	Y	Y	N	N	Y	Y	N	Y	Y	N	1

ADDITIONAL COMMENTS: (1) No lock (2) Bolt ear broken off (3) Bolts stripped (4) Bolt missing

EXISTING WELL INTEGRITY SURVEY FORM

PROJECT INFORMATION

Project Name: HW6

Project No.:

HW6
07003 · 003045 · 17.001

Date(s) of Inspection:

Field Personnel:

11/10/07

1. *Nic*

Dennis (Pax)

WELL INTEGRITY INFORMATION

ADDITIONAL COMMENTS: ① No lock ② Belt end broken off ③ Belts stripped ④ Bolt missing



APPENDIX B

D_o DISCUSSION AND CALCULATION

- B-1 LNAPL Specific Thickness (D_o) – January 9-10, 2007 – North Olive Stratum**
- B-2 LNAPL Specific Thickness (D_o) – January 9-10, 2007 – Rand Stratum**
- B-3 LNAPL Specific Thickness (D_o) – January 9-10, 2007 – Combined EPA and Shallow Main Sand Strata**
- B-4 LNAPL Specific Thickness (D_o) – January 9-10, 2007 – Main Sand Below the D Clay**



Appendix B: D_o Discussion and Calculation

The following information was provided on behalf of Mr. Andrew Kirkman, of The RETEC Group, Inc., on November 7, 2005.

The fluid characteristics that influence LNAPL distribution and recoverability from the subsurface include the following:

- LNAPL Density
- LNAPL Viscosity
- LNAPL and Water Interfacial tensions

In addition, the soil type can have a large influence on LNAPL distribution and recoverability from the subsurface. Soil characteristics that effect the distribution and presence of LNAPL in the subsurface include:

- Porosity
- Intrinsic permeability
- Pore size distribution
- Soil grain shape

Accounting for these parameters is necessary in order to accurately assess the distribution of LNAPL in the formation and estimate the true amount of LNAPL in the subsurface. Mapping of apparent LNAPL thicknesses measured in monitoring wells at a site with varying soil and LNAPL type is not an accurate depiction of LNAPL extent or magnitude. In order to provide an estimate of the actual LNAPL in the subsurface, the term "LNAPL specific thickness" is proposed to estimate the true amount of LNAPL in the formation.

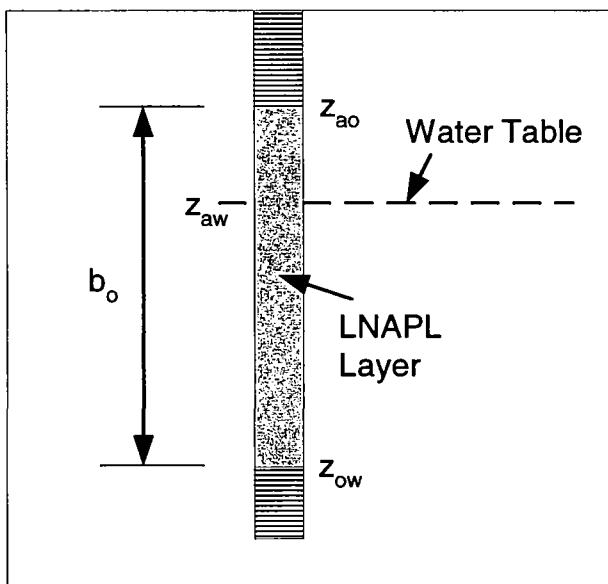
Because of the variance in soil and LNAPL physical characteristics, the same LNAPL thickness measured at two locations does not always represent the same distribution of LNAPL in the formation or the recoverability of LNAPL. For instance, one foot of LNAPL measured in a well installed in clay will have a much smaller specific thickness than if it were installed in sand. The same is true in terms of saturation. The pore spaces in sand are more interconnected and generally larger in the sand. The clay,



however, has smaller and less interconnected pores and a higher pressure is required to saturate those to the same saturation.

The following schematic (Charbeneau et al., 1999) shows a monitoring well with an LNAPL layer located between the air-NAPL interface z_{ao} and the NAPL-water interface z_{ow} . The total monitoring well LNAPL thickness is b_o . The elevation of the water table, z_{aw} , provides the datum for fluid levels. While the water table is not measured in a monitoring well because of the LNAPL layer, its elevation is easily determined from the elevations z_{ao} and z_{ow} , and the LNAPL specific gravity.

Figure 1



D_o is defined as the specific thickness of LNAPL, which is representative of the amount of LNAPL in a formation. For example, if you had a core of soil separated into its respective media (i.e., air, water, LNAPL, and soil), D_o is a normalized volume of LNAPL ($\text{feet}^3/\text{feet}^2$) per unit surface area, but is expressed as a thickness (in units of feet). At equilibrium, due to capillary forces in soil, the measured LNAPL thickness in a monitoring well, b_o , is always greater than D_o .

The relationship between measured monitoring well LNAPL thickness, b_o , and the specific LNAPL volume, D_o (the volume of LNAPL per unit surface area) may be calculated from the following equation:



$$D_o(b_o) = \int_{z_{ow}}^{z_{max}} n S_o(z) dz$$

Where:

Z_{max} = height of oil

Z_{ow} = height of the oil/water interface

S_o = saturation of oil

n = soil porosity

The function $D_o(b_o)$ may be approximated piecewise by a linear function of the form:

$$D_o = \beta (b_o - \chi)$$

The most accurate method to estimate LNAPL specific thickness is to collect soil core data, analyze Dean Stark LNAPL saturations and integrate LNAPL saturation over discrete depth intervals to calculate D_o (Adamski, et al, 2003). If LNAPL saturation and soil core data are available, D_o is calculated as follows:

$$D_o = \text{LNAPL \%} * \text{porosity} * \text{soil core interval (ft.)}$$

Where:

LNAPL % = oil saturation (in % of pore volume)

porosity = site-specific total porosity (in %)

soil core interval = interval of LNAPL impacted core (in feet)

Collection of soil cores from varying soil types across a site and discrete sampling and analyses of LNAPL saturations accurately depicts the true amount of LNAPL in each formation and eliminates the need for correction factors based on buoyancy or LNAPL density. Correction factors based on soil type and LNAPL type will provide accurate estimations of LNAPL specific thickness across a site.



References

- Adamski, M., V. Kremesec, R. Kolhatkar, C. Pearson, and B. Rowan, 2001. "LNAPL Saturation, Distribution, and Recovery in Fine Grained Soils," Proceedings of the Petroleum Hydrocarbons and Organic Chemicals in Ground Water Conference and Exposition, pp.178–192. November 14–16, 2001.
- Charbeneau, R.J., R.T. Johns, L.W. Lake, and M.J. McAdams, 1999. "Free-Product Recovery of Petroleum Hydrocarbon Liquid." American Petroleum Institute, Publication No. 4682. Ground Water Monitoring & Remediation, 20(3), Summer, pp. 147-158, 2000. June 1999.

Attachment 2

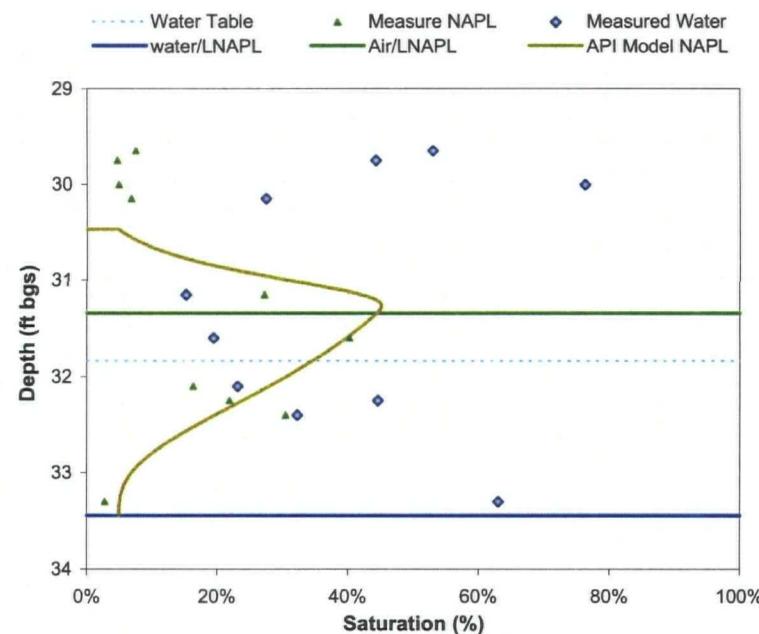
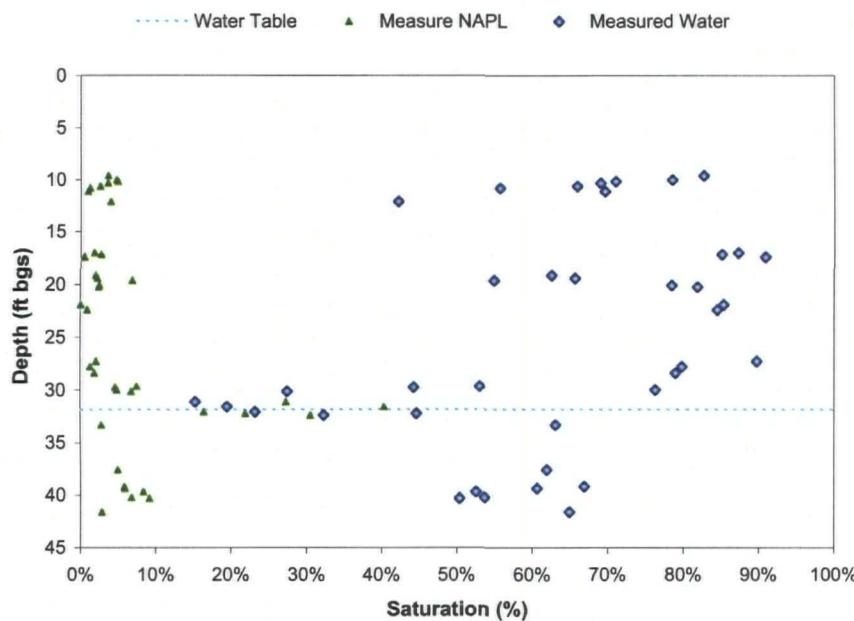
Specific LNAPL Thicknesses

Boring	Corre-sponding Monitoring Well	Date of Measured LNAPL Thickness and Baildown Test	Measured LNAPL Thickness (ft)	D _o (ft)		
				Total for Estimated Mobile Interval ¹	Calculated for Mobile Interval ²	Total for Smear Zone ¹
HCSB-1	HMW-44C	9/23/2005	2.1	0.30	0.32	0.60
HCSB-2	RW-5	9/23/2005	0.32	0.01	0.02	0.15
HCSB-3	MP-50C	ROST Log 2-19-2004	0.4	0.01	0.02	0.21
HCSB-4	MP-39C	10/5/2005	1.62	0.38	0.22	0.38
HCSB-5	MP-29D	9/20/2005	0.48	0.04	0.02	0.47
HCSB-5	MP-29C	9/20/2005	0.63	0.04	0.03	0.47

Notes:

1 Estimates are based on measured LNAPL saturation data from Dean-Stark core analyses.

2 Represents estimates based on API model that was calibrated to capillary pressure vs. saturation core analysis data.


Measured Saturation Data (Dean-Stark Method)

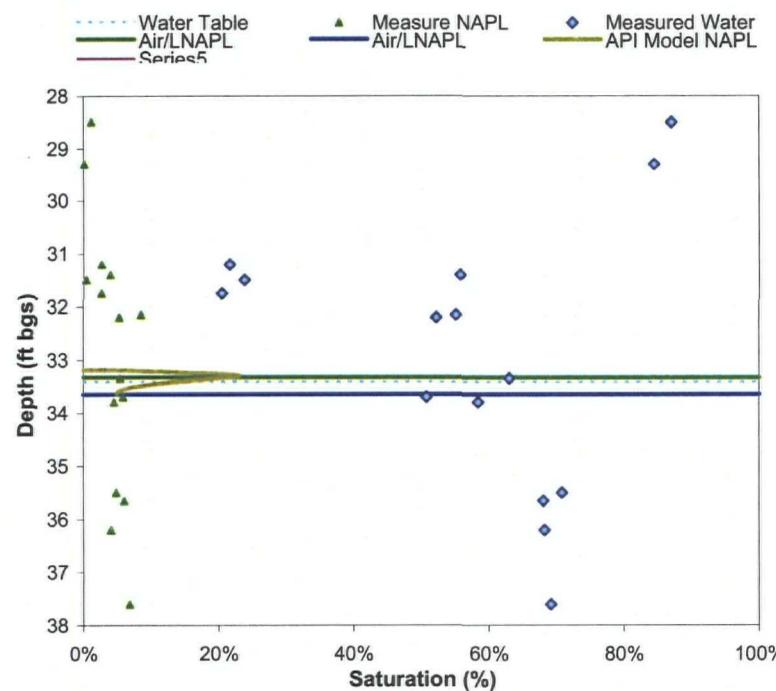
Depth	S_n	S_w	ϕ	Do	Do Mobile	Do Sum (ft)	Smear Zone
9.6	0.036	0.826	0.47	0.0079	0.0000		0.60
10	0.047	0.784	0.49	0.0036	0.0000		
10.15	0.048	0.709	0.51	0.0031	0.0000		
10.3	0.035	0.689	0.49	0.0045	0.0000		
10.6	0.025	0.658	0.51	0.0019	0.0000		
10.8	0.011	0.556	0.52	0.0016	0.0000		
11.1	0.009	0.695	0.50	0.0127	0.0000		
12.1	0.039	0.421	0.53				
17	0.017	0.872	0.52	0.0018	0.0000		
17.15	0.026	0.850	0.58	0.0022	0.0000		
17.4	0.004	0.908	0.58	0.0110	0.0000		
19.1	0.020	0.625	0.51	0.0032	0.0000		
19.4	0.022	0.656	0.49	0.0046	0.0000		
19.6	0.069	0.549	0.51	0.0105	0.0000		
20.05	0.025	0.784	0.48	0.0018	0.0000		
20.2	0.024	0.818	0.49	0.0100	0.0000		

Total Do over the Mobile Interval Where 0.30

Mobile Fraction of Do over the Mobile Interval 0.18

API Model Sn	Depth	Sn	Gauging Data - Well HMW-44C
	30.47	0	Ground Surface Elevation 429.78
	30.47	0.048218	Measuring Point Elevation NA
	30.499	0.054075	
	30.528	0.060538	Water Table Elevation 397.94
	30.557	0.067669	
	30.586	0.075537	
	30.615	0.084217	Estimated Water Table Depth
	30.644	0.093788	0 31.84
	30.673	0.104338	1 31.84
	30.702	0.115956	
	30.731	0.128733	
	30.76	0.142759	Sor 0.049
	30.789	0.158117	
	30.818	0.174875	
	30.847	0.193079	9/23/2005
	30.876	0.212733	DTP Corrected LNAPL Depth

21.9	0.000	0.853	0.53	0.0012	0.0000	30.905	0.233789	31	31.34
22.4	0.009	0.845	0.54			30.934	0.25612	DTW	Corrected water Depth
27.3	0.020	0.897	0.51	0.0041	0.0000	30.963	0.279506	33.1	33.44
27.8	0.013	0.798	0.47	0.0041	0.0000	30.992	0.303602		
28.4	0.018	0.789	0.41	0.0254	0.0000	31.021	0.327936	GS-MP	
29.65	0.074	0.529	0.45	0.0026	0.0005	31.05	0.351898	0.34	
29.75	0.046	0.442	0.43	0.0048	0.0000	31.079	0.374766		
30	0.048	0.762	0.39	0.0035	0.0005	31.108	0.395757		
30.15	0.067	0.274	0.43	0.0771	0.0554	31.137	0.414095		
31.15	0.272	0.152	0.46	0.0673	0.0574	31.166	0.429113		
31.6	0.402	0.194	0.43	0.0625	0.0514	31.195	0.440347		
32.1	0.163	0.231	0.47	0.0129	0.0096	31.224	0.447611		
32.25	0.218	0.446	0.44	0.0172	0.0140	31.253	0.451038		
32.4	0.304	0.322	0.44	0.0661	0.0464	31.282	0.451072		
33.3	0.027	0.630	0.45	0.0737	0.0000	31.311	0.44844		
37.6	0.049	0.619	0.45	0.0338	0.0024	31.34	0.444146		
39.2	0.058	0.668	0.35	0.0040	0.0006	31.445	0.426434		
39.4	0.058	0.606	0.34	0.0071	0.0022	31.55	0.407166		
39.7	0.083	0.525	0.33	0.0124	0.0043	31.655	0.386258		
40.2	0.067	0.536	0.33	0.0030	0.0012	31.76	0.363654		
40.3	0.091	0.503	0.42	0.0324	0.0060	31.865	0.33935		
41.6	0.028	0.649	0.40			31.97	0.313411		
						32.075	0.285999		
						32.18	0.257408		
						32.285	0.228081		
						32.39	0.198633		
						32.495	0.169837		
						32.6	0.142586		
						32.705	0.117808		
						32.81	0.096357		
						32.915	0.078878		
						33.02	0.065696		
						33.125	0.056752		
						33.23	0.051589		
						33.335	0.049392		
						33.44	0.049		

**API Model Sn****Depth** **Sn**

33.18323	0
33.18323	0.044088
33.18823	0.052866
33.19323	0.062034
33.19823	0.071574
33.20323	0.081459
33.20823	0.091653
33.21323	0.102109
33.21823	0.11277

Gauging Data - Well MP-42C**Ground Surface Elevation**

430.90

Measuring Point Elevation

NA

Water Table Elevation

397.49

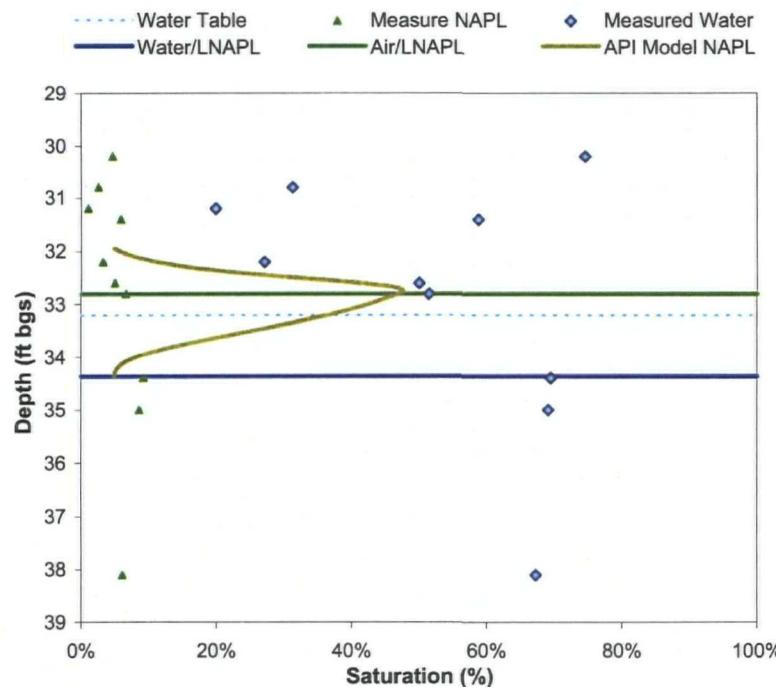
Estimated Water Table Depth

0 33.41

1 33.41

HCSB - 2*API Model Report, Hartford Working Group, Hartford, IL*

33.22323	0.123568		
33.22823	0.134421	Sor	
33.23323	0.145236		0.049
33.23823	0.155911		
33.24323	0.16633	9/23/2005	
33.24823	0.176373	DTP	Corrected LNAPL Depth
33.25323	0.185914	32.65	33.33
33.25823	0.194826	DTW	Corrected water Depth
33.26323	0.202985	32.97	33.65
33.26823	0.210275		
33.27323	0.216593	GS-MP	
33.27823	0.221854	0.68	
33.28323	0.225994		
33.28823	0.228975		
33.29323	0.230786		
33.29823	0.231443		
33.30323	0.230993		
33.30823	0.229509		
33.31323	0.227091		
33.31823	0.22386		
33.32323	0.219964		
33.32823	0.215571		
33.33323	0.210887		
33.34923	0.195603		
33.36523	0.180518		
33.38123	0.165757		
33.39723	0.151451		
33.41323	0.137733		
33.42923	0.124735		
33.44523	0.112578		
33.46123	0.101374		
33.47723	0.091215		
33.49323	0.082174		
33.50923	0.074295		
33.52523	0.067594		
33.54123	0.062061		
33.55723	0.057651		
33.57323	0.054295		
33.58923	0.051893		
33.60523	0.050323		
33.62123	0.049438		
33.63723	0.049066		
33.65323	0.049		

**API Model Sn**

Depth	Sn
31.94	0.0486
31.96867	0.052926
31.99733	0.057756
32.026	0.063151
32.05467	0.069179
32.08333	0.07592
32.112	0.083461
32.14067	0.091901
32.16933	0.101349

Gauging Data - Well MP-50C**Ground Surface Elevation**

430.57

Measuring Point Elevation

NA

Water Table Elevation

397.36

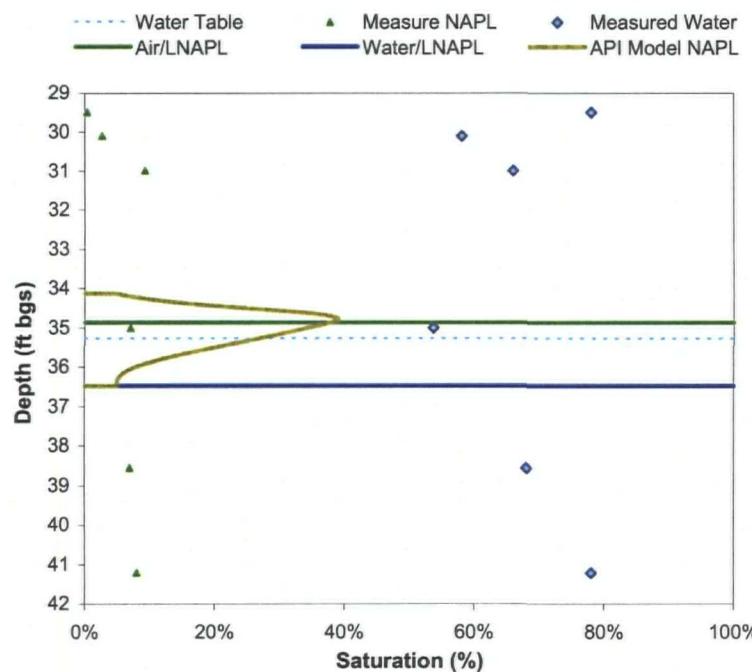
Estimated Water Table Depth

0 33.21

1 33.21

HCSB - 3*API Model Report, Hartford Working Group, Hartford, IL*

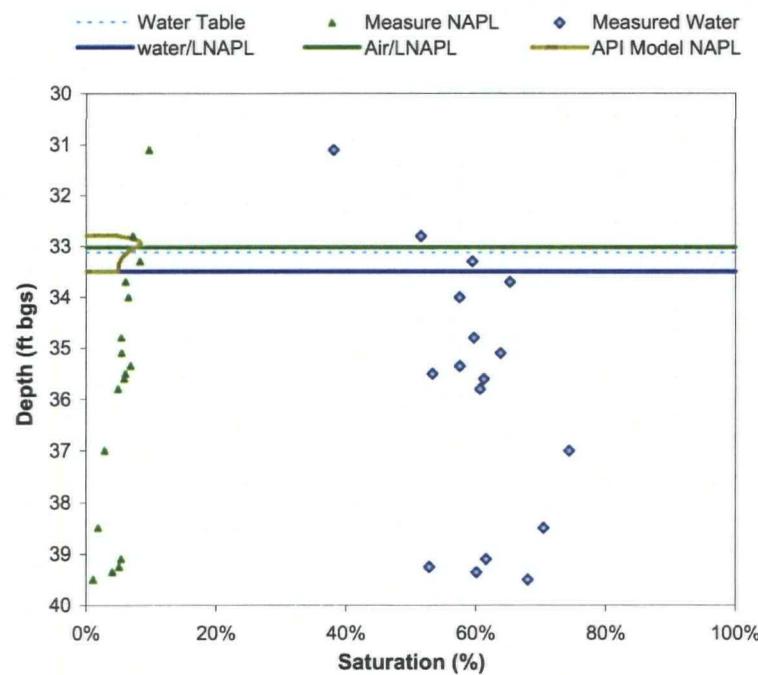
32.198	0.111927	
32.22667	0.123767	Sor
32.25533	0.137009	0.049
32.284	0.151802	
32.31267	0.16829	9/27/2005
32.34133	0.186607	DTP
32.37	0.206859	32.46
32.39867	0.229102	DTW
32.42733	0.253302	Corrected LNAPL Depth
32.456	0.279305	32.8
32.48467	0.306776	GS-MP
32.51333	0.335163	34.03
32.542	0.363656	34.37
32.57067	0.391203	
32.59933	0.416568	
32.628	0.438481	
32.65667	0.455829	
32.68533	0.467877	
32.714	0.474432	
32.74267	0.475902	
32.77133	0.473269	
32.8	0.46804	
32.8785	0.451248	
32.957	0.432828	
33.0355	0.412649	
33.114	0.390598	
33.1925	0.366598	
33.271	0.34063	
33.3495	0.312767	
33.428	0.283211	
33.5065	0.252337	
33.585	0.220724	
33.6635	0.18918	
33.742	0.158715	
33.8205	0.130465	
33.899	0.10556	
33.9775	0.084944	
34.056	0.069199	
34.1345	0.058414	
34.213	0.052151	
34.2915	0.049478	
34.37	0.049	



API Model Sn	Gauging Data - Well MP-39C	
Depth	Sn	Ground Surface Elevation
34.12	0	432.34
34.12	0.047165	Measuring Point Elevation
34.14467	0.053939	NA
34.16933	0.061355	Water Table Elevation
34.194	0.069467	397.07
34.21867	0.078329	Estimated Water Table Depth
34.24333	0.088001	0 35.27
34.268	0.098538	1 35.27
34.29267	0.109996	

HCSB - 4*API Model Report, Hartford Working Group, Hartford, IL*

34.31733	0.122424	
34.342	0.135863	Sor
34.36667	0.15034	0.049
34.39133	0.165861	
34.416	0.182406	10/5/2005
34.44067	0.199913	DTP
34.46533	0.218278	34.59
34.49	0.237334	Corrected LNAPL Depth
34.51467	0.25685	34.86
34.53933	0.276519	DTW
34.564	0.295965	36.21
34.58867	0.314744	Corrected water Depth
34.61333	0.332367	36.48
34.638	0.348332	
34.66267	0.362163	
34.68733	0.373456	
34.712	0.381926	
34.73667	0.387439	
34.76133	0.390034	
34.786	0.389922	
34.81067	0.387478	
34.83533	0.383222	
34.86	0.377831	
34.941	0.358627	
35.022	0.338253	
35.103	0.316752	
35.184	0.294213	
35.265	0.270788	
35.346	0.246695	
35.427	0.222234	
35.508	0.197784	
35.589	0.173798	
35.67	0.150789	
35.751	0.129291	
35.832	0.109824	
35.913	0.092835	
35.994	0.078655	
36.075	0.06745	
36.156	0.059203	
36.237	0.053704	
36.318	0.050565	
36.399	0.049236	
36.48	0.049	
36.48	0	



API Model Sn	Gauging Data - Well MP-29C	
Depth	Sn	Ground Surface Elevation
32.78952	0	429.74
32.78952	0.044941	Measuring Point Elevation
32.79719	0.048878	NA
32.80485	0.05264	Water Table Elevation
32.81252	0.056216	396.62
32.82019	0.059596	Estimated Water Table Depth
32.82785	0.062773	0 33.12
32.83552	0.065739	1 33.12
32.84319	0.068486	

HCSB - 5*API Model Report, Hartford Working Group, Hartford, IL*

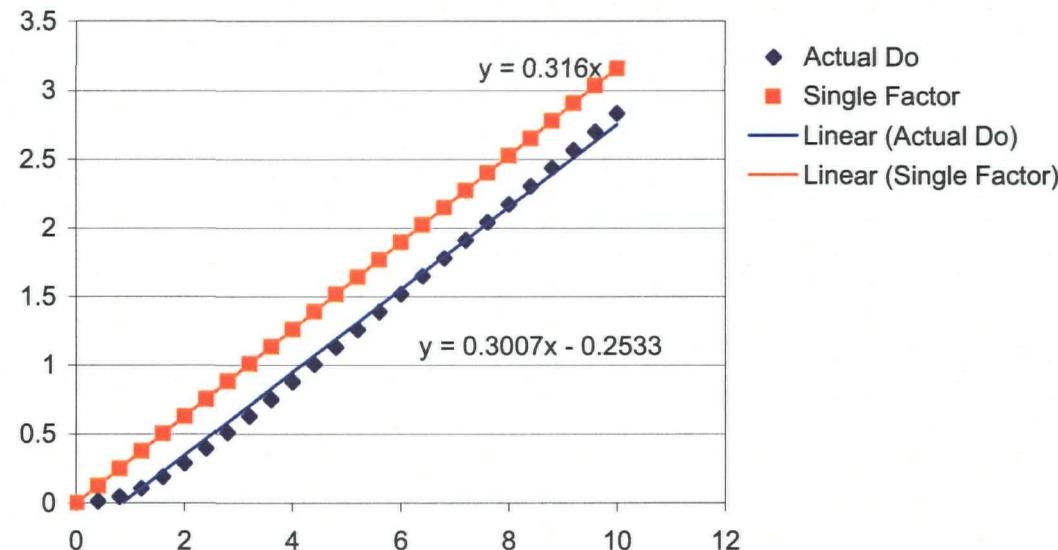
32.85085	0.07101		
32.85852	0.073306	Sor	
32.86619	0.075372		0.049
32.87385	0.077206		
32.88152	0.078808	10/5/2005	
32.88919	0.08018	DTP	Corrected LNAPL Depth
32.89685	0.081323		32.75
32.90452	0.082243	DTW	Corrected water Depth
32.91219	0.082944		33.23
32.91985	0.083432		33.5
32.92752	0.083717	GS-MP	
32.93519	0.083807		0.27
32.94285	0.083713		
32.95052	0.083445		
32.95819	0.083018	9/20/05.	
32.96585	0.082445	DTP	Corrected LNAPL Depth
32.97352	0.08174		24.05
32.98119	0.08092	DTW	Corrected water Depth
32.98885	0.080001		24.68
32.99652	0.079002		24.98
33.00419	0.077944	GS-MP	
33.01185	0.076847		0.3
33.01952	0.075738		
33.04352	0.072405		
33.06752	0.069322		
33.09152	0.066487		
33.11552	0.063899		
33.13952	0.061552		
33.16352	0.059441		
33.18752	0.057561		
33.21152	0.055904		
33.23552	0.054446		
33.25952	0.053219		
33.28352	0.052171		
33.30752	0.051303		
33.33152	0.050602		
33.35552	0.050053		
33.37952	0.049641		
33.40352	0.049349		
33.42752	0.049159		
33.45152	0.049053		
33.47552	0.049008		
33.49952	0.049		
33.49952	0		

Specific LNAPL Thickness Correction Factors

Model	Applicable Range			
	0-1 foot		>1 foot	
	β	χ	β	χ
HCSB-1	0.06	0.00	0.29	0.95
HCSB-2	0.07	0.00	0.31	0.92
HCSB-3	0.10	0.00	0.33	0.83
HCSB-4	0.07	0.00	0.30	0.93
HCSB-5	0.07	0.00	0.30	0.93

$$D_o = \beta (b_n - \chi)$$

Do HCSB-1		
bn	API Model	Single Factor
0	0	0
0.4	0.015061459	0.1264
0.8	0.046794121	0.2528
1.2	0.106782	0.3792
1.6	0.190064385	0.5056
2	0.288706431	0.632
2.4	0.397092964	0.7584
2.8	0.511856799	0.8848
3.2	0.630974444	1.0112
3.6	0.752951226	1.1376
4	0.87743555	1.264
4.4	1.003403703	1.3904
4.8	1.130706734	1.5168
5.2	1.258829007	1.6432
5.6	1.388042171	1.7696
6	1.517714439	1.896
6.4	1.647966213	2.0224
6.8	1.778704557	2.1488
7.2	1.90985501	2.2752
7.6	2.041115339	2.4016
8	2.172677251	2.528
8.4	2.304504684	2.6544
8.8	2.436333996	2.7808
9.2	2.568614435	2.9072
9.6	2.700844032	3.0336
10	2.833220096	3.16





D₀ CALCULATIONS TABLE DEVELOPED BY CLAYTON

**TABLE
D_o CALCULATIONS DEVELOPED BY CLAYTON**

1190505040 – Madison County – ILR000128249
The Hartford Working Group / Hartford, Illinois

Apparent Product Thickness	Do		
	yellow HCSB-1	blue-average HCSB-1 to 4	green HCSB-5
0.1	0.01	0.01	0.01
0.2	0.01	0.02	0.01
0.3	0.02	0.02	0.02
0.4	0.02	0.03	0.03
0.5	0.03	0.04	0.03
0.6	0.04	0.05	0.04
0.7	0.04	0.06	0.05
0.8	0.05	0.06	0.05
0.9	0.05	0.07	0.06
1	0.06	0.08	0.07
1.1	0.04	0.07	0.05
1.2	0.07	0.10	0.08
1.3	0.10	0.13	0.11
1.4	0.13	0.16	0.14
1.5	0.17	0.19	0.17
1.6	0.19	0.22	0.20
1.7	0.22	0.25	0.23
1.8	0.25	0.28	0.26
1.9	0.28	0.32	0.29
2	0.31	0.35	0.33
2.1	0.34	0.38	0.36
2.2	0.37	0.41	0.39
2.3	0.40	0.44	0.42
2.4	0.43	0.47	0.45
2.5	0.46	0.50	0.48
2.6	0.48	0.53	0.51
2.7	0.51	0.57	0.54
2.8	0.54	0.60	0.57
2.9	0.57	0.63	0.60
3	0.60	0.66	0.63
3.1	0.63	0.69	0.66
3.2	0.66	0.72	0.69
3.3	0.69	0.75	0.72
3.4	0.72	0.78	0.75
3.5	0.75	0.82	0.78
3.6	0.78	0.85	0.81
3.7	0.81	0.88	0.84
3.8	0.84	0.91	0.87
4	0.90	0.97	0.93
4.1	0.93	1.00	0.96
4.2	0.95	1.04	0.99
4.3	0.98	1.07	1.02
4.4	1.01	1.10	1.05
4.5	1.04	1.13	1.08
4.6	1.07	1.16	1.11
4.7	1.10	1.19	1.14
4.8	1.13	1.22	1.17
4.9	1.16	1.25	1.20
5	1.19	1.29	1.24
5.1	1.22	1.32	1.27
5.2	1.25	1.35	1.30
5.3	1.28	1.38	1.33
5.4	1.31	1.41	1.36
5.5	1.34	1.44	1.39
5.6	1.37	1.47	1.42
5.7	1.40	1.50	1.45
5.8	1.42	1.54	1.48
5.9	1.45	1.57	1.51
6	1.48	1.60	1.54

Main Sand					
Yellow	Blue	Blue	Green	Clean	Wells Removed
MP-47C	MP-79C/D	MP-99C	HMW-38C	HMW-39C	HB-32
MP-55C	MP-80C	MP-100D	HMW-46C	HMW-51C	RW-4
HMW-44C	HB-31	MP-101C	HMW-47C	MP-81C	
HMW-54B	MP-30C	MP-102C	HMW-45C	HMW-41C	
HMW-49D	MP-83C	MP-103C	MP-78D	HMW-25	
	MP-31C	MP-104C	MP-29D	HMW-26	
	MP-38C		RW-4A	HMW-27	
	MP-32B/C		RW-3	HMW-28	
	MP-34C		MP-85D	HMW-29	
	MP-33D		HMW-48D	MP-61C	
	MP-39C		SP-42	MP-89C	
	HMW-18			MP-62C	
	MP-43C			MP-63C	
	MP-48B/C			HMW-43C	
	MP-49C			HMW-52C	
	HMW-19			HB-38	
	MP-84C			MP-65C	
	MP-86C			MP-66C	
	MP-87C			MP-67C	
	RW-1			HP-1A	
	MP-82C			HP-1B	
	HMW-40C			HP-1C	
	HMW-08			HP-2A	
	HMW-22			HP-3A	
	MP-36C			HP-3B	
	MP-35D			HP-3C	
	HMW-14			HP-4A	
	MP-40C			HP-4B	
	MP-41C			HP-4C	
	MP-44D			HP-5A	
	MP-50C			HP-5B	
	MP-52C			HP-5C	
	MP-37D			HP-6A	
	RW-5			HP-7A	
	MP-42C			HP-8A	
	HMW-10			HP-9A	
	HMW-02			HMW-50C	
	RW-2			SP-41	
	MP-45C			SP-36	
	MP-46C			P-77	
	HB-30			P-78	
	MP-51D			P-79	
	MP-53C			P-106	
	HB-37			MP-92D	
	MP-54C				
	MP-77C				
	MP-56C				
	HMW-20				
	MP-57C				
	MP-60C				
	HMW-53B				
	MP-64C				
	MP-59C				
	MP-58C				
	MP-88C				
	HMW-42B				
	MP-90C				
	MP-91D				
	MP-96D				
	MP-97D				

Notes: Updated to incorporate new wells on October 11, 2006.



In January 2007, the approximate extent of LNAPL, the apparent product thickness, and the LNAPL specific thickness (D_o) (Clayton 2005) were determined, where present, for wells installed in each of the four hydrostratigraphic units (a discussion of D_o and how it is calculated is provided above):

- The North Olive Stratum well gauging data did not indicate the presence of measurable LNAPL (reference Figure B-1).
- The Rand Stratum well gauging data indicated the presence of LNAPL at three wells: HMW-4 with an apparent product thickness of 0.02 feet and a LNAPL specific thickness of 0.01 feet, MP-29C with an apparent product thickness of 0.01 feet and a LNAPL specific thickness of 0.01 feet and MP-37C with an apparent product thickness of 0.01 feet and a LNAPL specific thickness of 0.01 feet.

The approximate extent of LNAPL in the Rand Stratum appeared to be localized in the areas of HMW-4 (located between East Birch Street and East Rand Avenue, along North Olive Street) and MP-29C (located just north of East Birch Street, along North Market Street). Historically in 2006, LNAPL had been limited to the vicinity of probe HMW-48B (located north of East Birch Street, north of HMW-4, along North Olive Street) in April, July, and October; HMW-4 in October; and MP-29C in January, April, July, and October. The approximate extent of LNAPL at MP-37C (located on East Cherry Street, between North Market Street and North Olive Street) appeared limited to the immediate area of the monitoring probe, as it had in July and October 2006. The locations of the referenced probes are provided on Figure B-2.

- The combined EPA and shallow Main Sand Strata well gauging data indicated LNAPL was detected at 58 wells, with an apparent product thickness ranging from 0.03 (MP-52C) to 4.31 feet (MP-79C) and a LNAPL specific thickness ranging from 0.01 feet (HB-31, HMW-46C, HMW-47C, MP-52C, MP-58C, MP-85C, and MP-86C) to 1.07 feet (MP-79C).

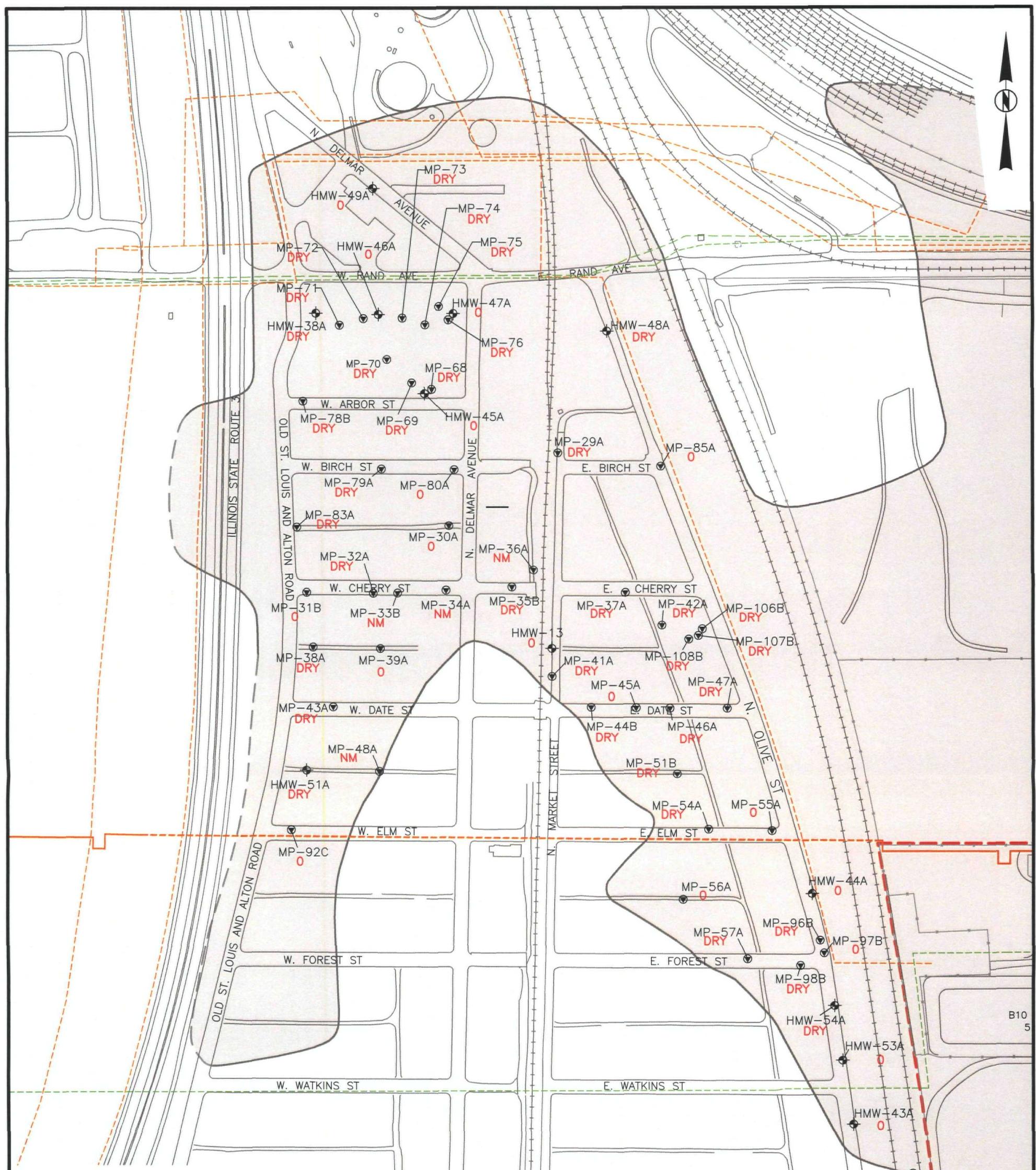
In January 2007, the approximate extent of LNAPL in the combined EPA and shallow Main Sand Strata was limited in Hartford to south of Rand Avenue, east of Illinois State Route 3, and north of East Maple Street. The locations of the referenced probes are provided on Figure B-3.

- The Main Sand below the D Clay well data did not indicate the presence of measurable LNAPL (reference Figure B-4).



APPENDIX B-1

LNAPL SPECIFIC THICKNESS (D_0) – JANUARY 9-10, 2007 – NORTH OLIVE STRATUM



LEGEND

- MONITORING WELL (HMW)
- MONITORING PROBE (MP)
- 0 APPARENT PRODUCT THICKNESS (FEET)/Do (FEET)
- NM NOT MEASURED
- INTERPRETED EXTENT OF STRATUM (DASHED WHERE EXTRAPOLATED)
- PETROLEUM PIPELINE CORRIDORS (UNDERGROUND)
- INDUSTRIAL SEWER CORRIDOR (UNDERGROUND)

NOTES:

1. TOP OF CASING (TOC) ELEVATIONS USED IN THIS MAP FOR VILLAGE WELLS WERE OBTAINED BY SURVEYS COMPLETED BY CMT, INC. IN 2003-2006.
2. BASE MAP CREATED FROM AERIAL PHOTOGRAHMETRY DATED APRIL, 2004 BY CONTINENTAL MAPPING CONSULTANTS, INC.
3. Do IS A NORMALIZED VOLUME OF LNAPL (FT^3/FT) PER $\frac{1}{2}$ UNIT SURFACE AREA, BUT IS EXPRESSED AS A THICKNESS (IN UNITS OF FEET).
4. A "0" AT A MONITORING LOCATION INDICATES THERE WAS NO LNAPL GAUGED AT THE LOCATION AND, THEREFORE, Do ALSO EQUALS "0".

SCALE IN FEET
0 125 250 500

CHECK BY HLM/KDC
DRAWN BY BCP
DATE 2-8-07
SCALE AS SHOWN
CAD NO. 0309514007d49a
PRJ NO. 003095.17

LNPAL SPECIFIC THICKNESS (Do)
JANUARY 9-10, 2007
NORTH OLIVE STRATUM
THE HARTFORD AREA HYDROCARBON PLUME SITE
THE HARTFORD WORKING GROUP
HARTFORD, ILLINOIS



FIGURE

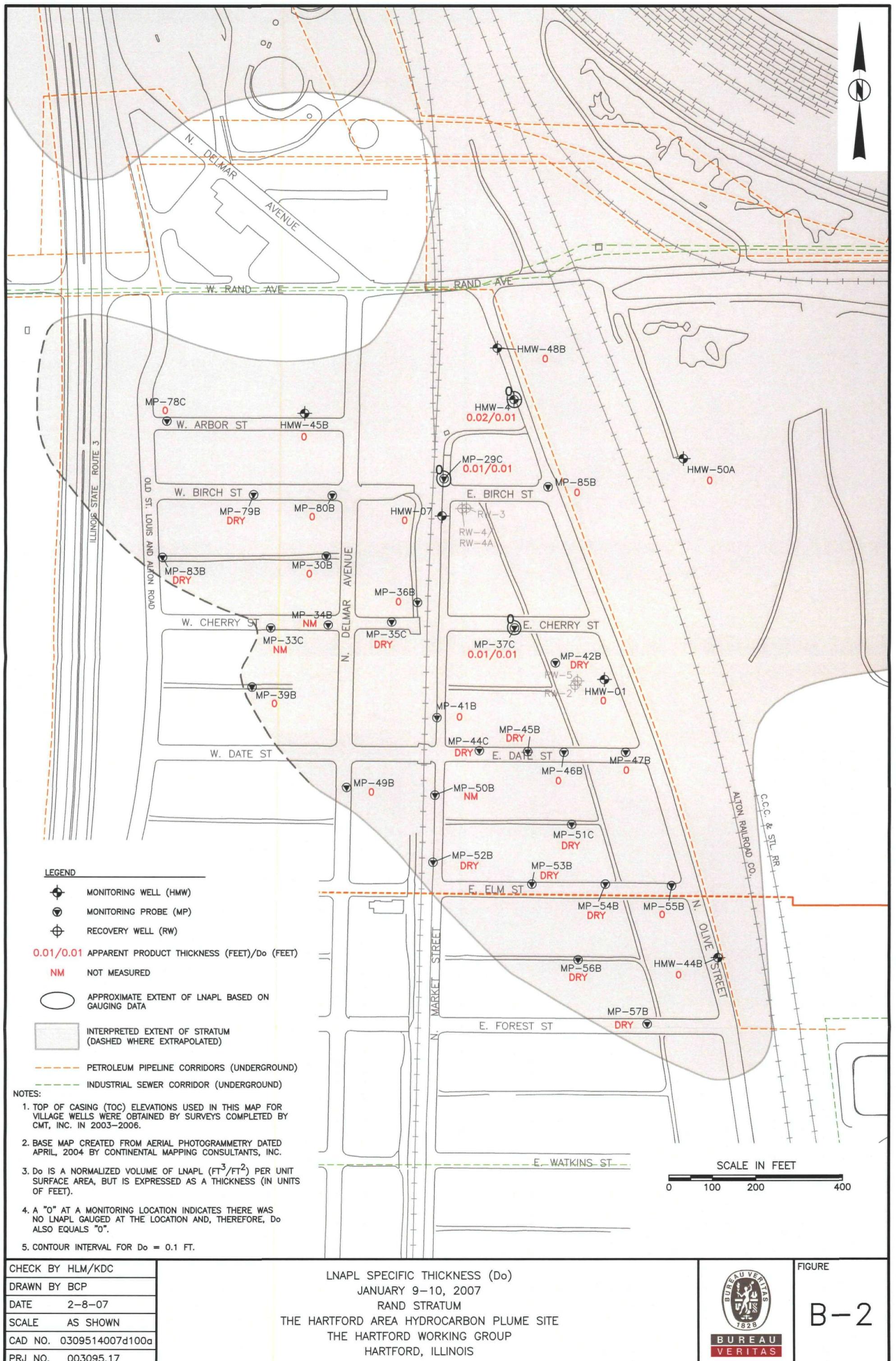
B-1

BUREAU
VERITAS



APPENDIX B-2

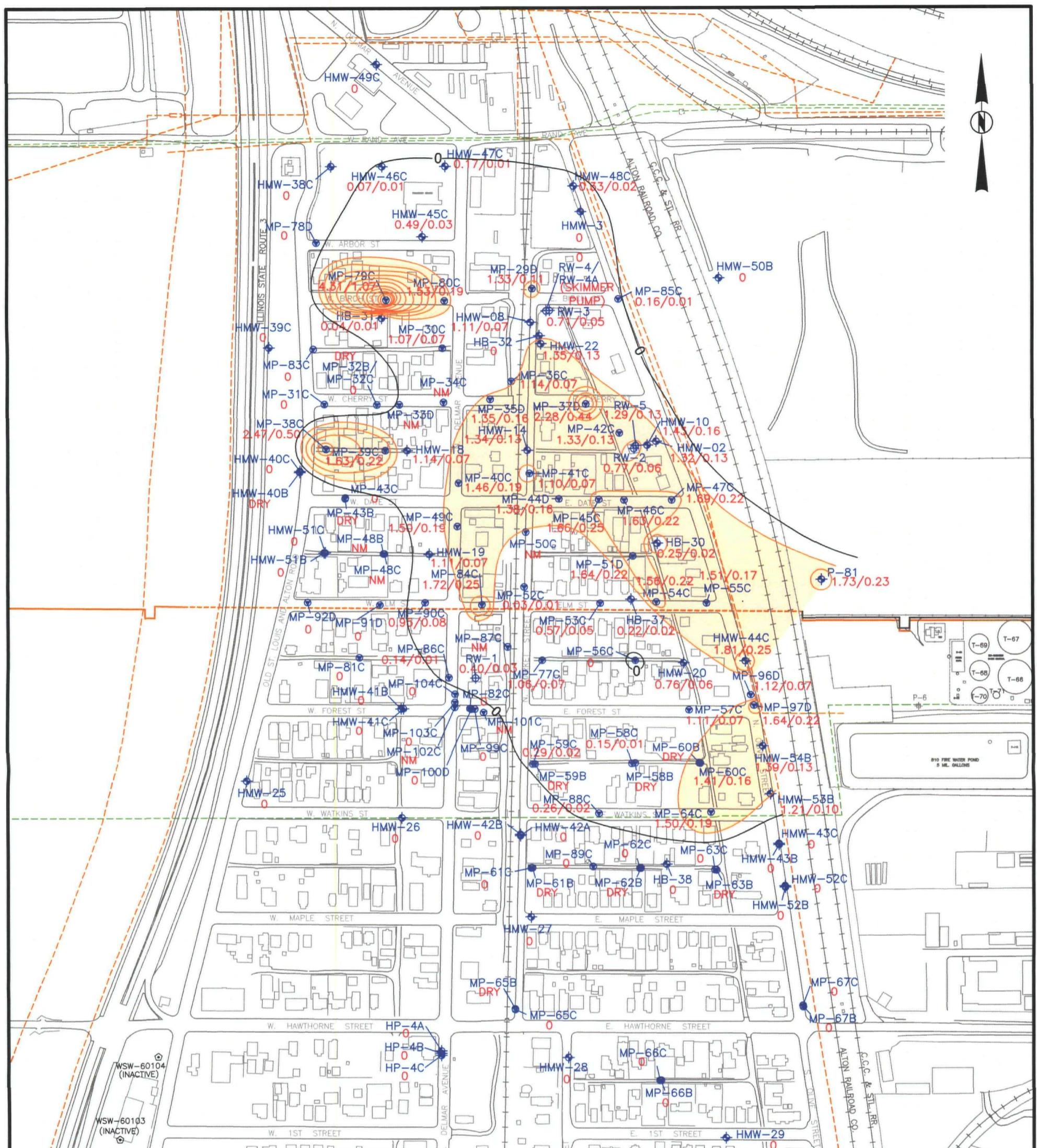
LNAPL SPECIFIC THICKNESS (D_0) – JANUARY 9-10, 2007 – RAND STRATUM





APPENDIX B-3

LNAPL SPECIFIC THICKNESS (D_o) – JANUARY 9-10, 2007 – COMBINED EPA AND SHALLOW MAIN SAND STRATA



LEGEND

- MONITORING WELL (HMW, HB)
- MONITORING PROBE (MP)
- RECOVERY WELL (RW)
- 1.66/0.25 APPARENT PRODUCT THICKNESS (FEET)/Do (FEET)
- NM NOT MEASURED
- PETROLEUM PIPELINE CORRIDORS (UNDERGROUND)
- - INDUSTRIAL SEWER CORRIDOR (UNDERGROUND)
- () APPROXIMATE EXTENT OF LNAPL BASED ON GAUGING DATA
- () LNAPL SPECIFIC THICKNESS BETWEEN 0.1 AND 1 FOOT

NOTES:

1. TOP OF CASING (TOC) ELEVATIONS USED IN THIS MAP FOR VILLAGE WELLS WERE OBTAINED BY SURVEYS COMPLETED BY CMT, INC. IN 2003-2006.
2. BASE MAP CREATED FROM AERIAL PHOTOGRAHAMTRY DATED APRIL, 2004 BY CONTINENTAL MAPPING CONSULTANTS, INC.
3. Do IS A NORMALIZED VOLUME OF LNAPL (FT³/FT²) PER UNIT SURFACE AREA, BUT IS EXPRESSED AS A THICKNESS (IN UNITS OF FEET).
4. A "0" AT A MONITORING LOCATION INDICATES THERE WAS NO LNAPL GAUGED AT THE LOCATION AND, THEREFORE, Do ALSO EQUALS "0".
5. CONTOUR INTERVAL FOR Do = 0.1 FT.
6. WELLS EXCLUDED: RW-4, HB-32, HMW-3

SCALE IN FEET
0 150 300 600

CHECK BY HLM/KDC
DRAWN BY BCP
DATE 3-16-07
SCALE AS SHOWN
CAD NO. 0309514007d102a
PRJ NO. 003095.17

LNAPL SPECIFIC THICKNESS (Do)
JANUARY 9-10, 2007
COMBINED EPA STRATUM AND SHALLOW MAIN SAND
THE HARTFORD AREA HYDROCARBON PLUME SITE
THE HARTFORD WORKING GROUP
HARTFORD, ILLINOIS



FIGURE

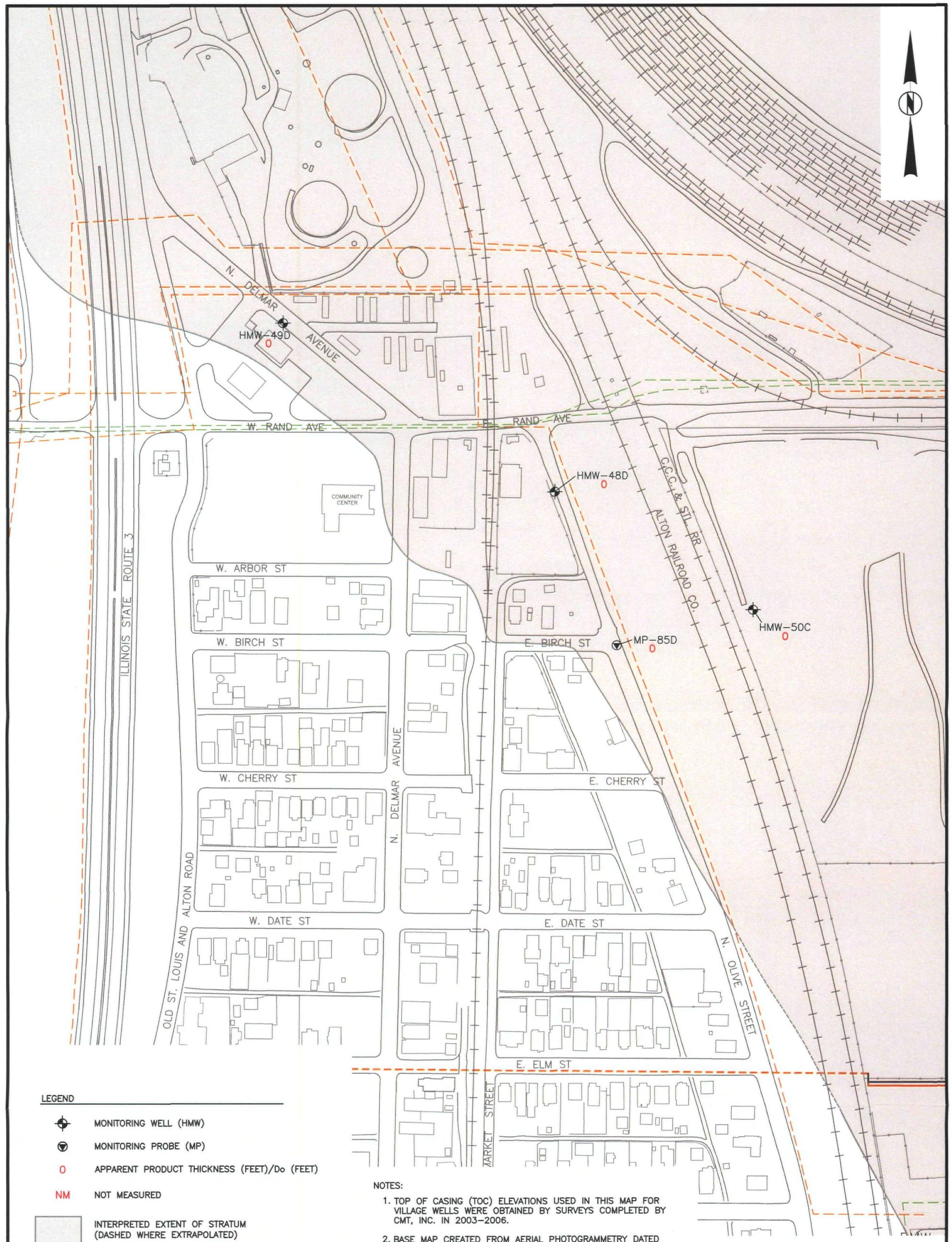
B-3

BUREAU
VERITAS



APPENDIX B-4

LNAPL SPECIFIC THICKNESS (D_0) – JANUARY 9-10, 2007 – MAIN SAND BELOW THE D CLAY



CHECK BY HLM/KDC
DRAWN BY BCP
DATE 2-8-07
SCALE AS SHOWN
CAD NO. 0309514007d101a
PRJ NO. 003095.17

LNAPL SPECIFIC THICKNESS (Do)
JANUARY 9-10, 2007
MAIN SAND BELOW THE D CLAY
THE HARTFORD AREA HYDROCARBON PLUME SITE
THE HARTFORD WORKING GROUP
HARTFORD, ILLINOIS



FIGURE
B-4

BUREAU
VERITAS



APPENDIX C

LOW FLOW SAMPLING MONITORING WELL SAMPLING PUMP/TUBING INTAKE

**Low Flow Sampling
Monitoring Well Sampling
Pump/Tubing Intake**



**BUREAU
VERITAS**

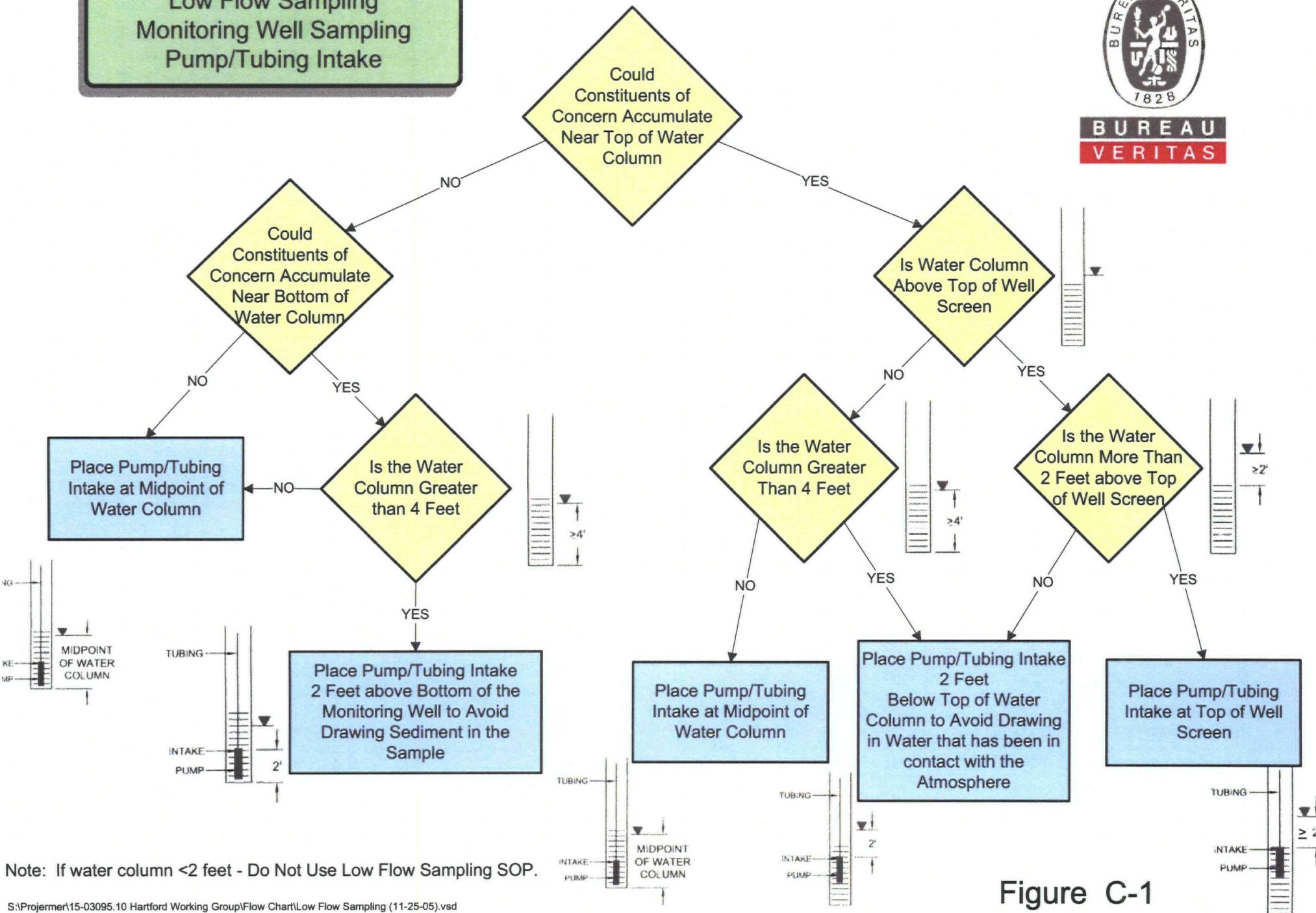


Figure C-1

Note: If water column <2 feet - Do Not Use Low Flow Sampling SOP.



APPENDIX D

SUMMARY OF INDICATOR PARAMETER MEASUREMENTS – JANUARY 2007

Well Sampling Indicator Parameters - January 2007 Quarterly Sampling
Village of Hartford

1190505040 -- Madison County -- ILR 000128249
The Hartford Working Group / Hartford, Illinois

Well Number	Date	Time	Total Volume of Water Removed (gals)	Temperature °C	pH (std. units)	Conductivity (umhos/cm)	TDS (ppm)	Turbidity (ntu)	Dissolved Oxygen (mg/L)	Visual Clarity	Comments
HMW-39B	01/15/07	1315	1.64	8.0	5.95	39200	NM	NM	15.62	NM	Well Sampled by Peristaltic Pump
		1336	3.28	12.9	7.06	688	NM	NM	6.47	NM	
		1346	4.92	12.5	7.56	658	NM	NM	5.88	NM	
		1355	6.56	12.6	7.72	644	NM	NM	5.74	NM	
		1405	8.20	12.4	7.80	645	NM	NM	5.70	NM	
		1420	9.84	12.1	7.82	643	NM	NM	6.00	NM	
HMW-49B	01/15/07	1508	0.18	13.1	6.90	2170	NM	NM	6.98	NM	Well Purged Dry Sampled after Recharge
		1511	0.36	14.7	6.92	2090	NM	NM	6.36	NM	Well Sampled by Peristaltic Pump
		1513	0.54	14.3	6.91	2090	NM	NM	6.25	NM	
HMW-50B	01/15/07	0901	1.30	13.5	5.73	1350	NM	NM	10.12	NM	Well Sampled by Bailer
		0913	2.60	13.3	6.42	1630	NM	NM	9.3	NM	
		0920	3.90	13.3	6.64	1840	NM	NM	9.00	NM	
		0932	5.20	13.3	6.69	2250	NM	NM	8.25	NM	
		0939	6.50	13.5	6.70	2670	NM	NM	8.14	NM	
		0946	7.80	13.5	6.76	2450	NM	NM	8.15	NM	
		0953	9.10	13.5	6.74	2730	NM	NM	8.12	NM	
		0959	10.40	13.3	6.73	3000	NM	NM	8.02	NM	
		1007	11.70	13.1	6.78	2580	NM	NM	7.90	NM	
		1014	13.00	13.1	6.76	2750	NM	NM	7.68	NM	
		1022	14.30	12.9	6.71	3120	NM	NM	7.80	NM	

NOTES:

gals = gallons

°C = degrees Centigrade

ntu = nephelometric turbidity units

umhos/cm = micromhos per centimeter

ppm = parts per millions

mg/L = milligrams per liter

NM = not measured

INSTRUCTIONS: This is the raw data export format from the Win-Situ® Low Flow Cell data file:HARTFORD WORKING GROUP-07003-003095.15-007-HMW-25-1-15-2007.flo To Generate a report insert a new sheet based on a sheet template. See 'Sheet Template' and 'Insert a new sheet that's based on a custom template' in Excel help. An example template, InSituLowFlow.xls, is provided by the Win-Situ® Installation. You may copy this template from the templates subfolder in the folder where Win-Situ® is installed.

Operator Name: T_GRISEL
 Company Name: CLAYTON-BV
 Project Name: HARTFORD WORKING GROUP
 Site Name: 07003-003095.15-007
 Well ID: HMW-25/070115

pH Sensor:	Installed	Target Value	0.1 [pH]	Target Percent	0 [%]
ORP Sensor:	Installed	Target Value	10 [mV]	Target Percent	0 [%]
DO Sensor:	Installed	Target Value	0.3 [mg/L]	Target Percent	0 [%]
Cond Sensor:	Installed	Target Value	0.1 [μ S/cm]	Target Percent	3 [%]
Turb Sensor:	Installed	Target Value	1 [NTU]	Target Percent	10 [%]

Pump Model/Type: DEDICATED
 Tubing Type: POLYETHYLENE
 Tubing Diam: 0.17 [in]
 Tubing Length: 33 [ft]
 Well Depth: 35.14 [ft]
 Well Diam: 2 [in]
 Screen Len: 176.4 [in]
 Screen Depth: 23.67 [ft]
 Pump Inlet Depth: 0 [in]
 Depth to Water: 29.72 [ft]
 Pump Level (TOC): 31.72 [ft]

Final Pumping Rate: 188 [mL/min]
 Stable Draw Down: 0 [ft]

Total Volume Formula: Volume = cup (200 mL) + tubing (147.3 mL) - pH_ORP (16 mL) - DO (14 mL) - Cond (13 mL) - Turb (40 mL)

Calculated Total Volume: 264.29 [mL]
 Actual Total Volume: 264.29 [mL]
 Calculated Measurement Interval: 85 [sec]
 Actual Measurement Interval: 85 [sec]

Start date/time: 1/15/2007 9:32:36
 End date/time: 1/15/2007 9:39:11
 Total Time: 0:06:35

Reading #	pH [pH]	Variance	ORP [mV]	Variance	DO [mg/L]	Variance	RDO []	Variance	Cond [μ S/cm @25C]	Variance	Turb [NTU]	Variance	Temp [C]	Variance	Time
4	6.67	6.67	228.59	228.59	3.38	3.38			1171.87	1171.87	-0.01	-0.01	12.98	12.98	9:32:36
3	6.67	0	224.79	-3.8	1.49	-1.89			1165.41	-6.47	-0.31	-0.3	13.79	0.81	9:34:04
2	6.68	0.02	223.33	-1.45	0.93	-0.56			1176.43	11.02	0.24	0.55	13.94	0.15	9:35:31
1	6.7	0.01	221.96	-1.37	0.73	-0.21			1179.87	3.44	0.24	0	14.01	0.06	9:36:59
0	6.71	0.02	219.95	-2.01	0.64	-0.08			1180.35	0.48	0.39	0.15	13.96	-0.05	9:38:27

pH Min: 6.67
 pH Max: 6.71
 ORP Min: 219.95
 ORP Max: 228.59
 DO Min: 0.64
 DO Max: 3.38
 RDO Min:
 RDO Max:
 Cond Min: 1165.41
 Cond Max: 1180.35
 Turb Min: -0.31
 Turb Max: 0.39
 Temp Min: 12.98
 Temp Max: 14.01

Notes:

TURBIDITY<10NTU

Device Record:

In-Situ Inc. Troll 9000 Profiler XP

Report generated: 1/20/2007 11:07:22
Report from file: ...HARTFORD WORKING GROUP-07003-003095.15-007-HMW-25-1-15-2007.flo.bin
Win-Situ® Version 4.57.0.0

Serial number: 45176
Firmware Version 2
Unit name: MP Troll 9000

Test name: LowFlow

Test defined on: 1/15/2007 9:32:36
Test started on: 1/15/2007 9:32:36
Test stopped on: N/A N/A

Data gathered using Event testing
Time between data points: 0.0 Seconds.
Time between default storages: 0.0 Seconds.
Monitoring data on channel [1]
Data stored if delta value exceeds: 0 Celsius
Number of data samples: 5

TOTAL DATA SAMPLES 5

Channel number [1]
Measurement type: Temperature
Channel name:

Channel number [3]
Measurement type: Barometric Pressure
Channel name:

Channel number [4]
Measurement type: Turbidity
Channel name:

Channel number [5]
Measurement type: Battery Voltage
Channel name:

Channel number [11]
Measurement type: ORP
Channel name:

Channel number [12]
Measurement type: pH
Channel name:

Channel number [25]
Measurement type: Dissolved Oxygen
Channel name:

Channel number [25]
Measurement type:
Channel name:

Dissolved Oxygen %Saturation

Channel number [45]
Measurement type:
Channel name:

Conductivity, Low Range

Date	Time	ET (sec)	Chan[1]	Chan[3]	Chan[4]	Chan[5]	Chan[11]	Chan[12]	Chan[25]	Chan[25]	Chan[45]
			Temperature Celsius	Barometric Inches Hg	Turbidity NTU	Battery Volts	ORP millivolts	pH pH	Clark DO milligrams/L	Clark DO Sat %Saturation	Conductivity microSiemens/cm
1/15/2007	9:32:36	0	12.98	29.612		0	2.811	229	6.67	3.38	32.5269
1/15/2007	9:34:04	88	13.79	29.612	-0.3	2.785	225	6.67	1.49	14.592	915.93
1/15/2007	9:35:31	175	13.94	29.613	0.2	2.811	223	6.68	0.93	9.176	927.97
1/15/2007	9:36:59	263	14.01	29.614	0.2	2.811	222	6.7	0.73	7.1606	932.12
1/15/2007	9:38:27	351	13.96	29.614	0.4	2.785	220	6.71	0.64	6.3203	931.36

INSTRUCTIONS: This is the raw data export format from the Win-Situ® Low Flow Cell data file:HARTFORD SENTINEL WELL SAMPLING GROUP-07003-003095.15-007-HMW-26-070115-1-15-2007.flw To Generate a report insert a new sheet based on a sheet template. See 'Sheet Template' and 'Insert a new sheet that's based on a custom template' in Excel help. An example template, InSituLowFlow.xls, is provided by the Win-Situ® Installation. You may copy this template from the templates subfolder in the folder where Win-Situ® is

Operator Name: T_GRISEL

Company Name: CLAYTON-BV

Project Name: HARTFORD WORKING GROUP

Site Name: 07003-003095.15-007

Well ID: HMW-26-070115

pH Sensor:	Installed	Target Value	0.1 [pH]	Target Percent	0 [%]
ORP Sensor:	Installed	Target Value	10 [mV]	Target Percent	0 [%]
DO Sensor:	Installed	Target Value	0.3 [mg/L]	Target Percent	0 [%]
Cond Sensor:	Installed	Target Value	0.1 [μ S/cm]	Target Percent	3 [%]
Turb Sensor:	Installed	Target Value	1 [NTU]	Target Percent	10 [%]

Pump Model/Type: DEDICATED

Tubing Type: POLYETHYLENE

Tubing Diam: 0.17 [in]

Tubing Length: 34 [ft]

Well Depth: 35.59 [ft]

Well Diam: 2 [in]

Screen Len: 176.4 [in]

Screen Depth: 24.61 [ft]

Pump Inlet Depth: 0 [in]

Depth to Water: 27.92 [ft]

Pump Level (TOC): 29.92 [ft]

Final Pumping Rate: 400 [mL/min]

Stable Draw Down: 0 [ft]

Total Volume Formula: Volume = cup (200 mL) + tubing (151.8 mL) - pH_ORP (16 mL) - DO (14 mL) - Cond (13 mL) - Turb (40 mL)

Calculated Total Volume: 268.76 [mL]

Actual Total Volume: 268.76 [mL]

Calculated Measurement Interval: 41 [sec]

Actual Measurement Interval: 41 [sec]

Start date/time: 1/15/2007 10:58:41

End date/time: 1/15/2007 11:10:29

Total Time: 0:11:48

Reading #	pH [pH]	Variance	ORP [mV]	Variance	DO [mg/L]	Variance	RDO []	Variance	Cond [μ S/cm @25C]	Variance	Turb [NTU]	Variance	Temp [C]	Variance	Time
4	6.65	0	-88.96	-0.47	0.37	0			1718.74	2.58	19.29	1.55	14.88	-0.15	11:07:09
3	6.65	0	-89.52	-0.56	0.4	0.03			1719.59	0.85	15.74	-3.55	14.88	0	11:07:50
2	6.65	0	-90.07	-0.56	0.37	-0.03			1715.75	-3.84	17.09	1.35	14.75	-0.13	11:08:33
1	6.65	0	-90.68	-0.6	0.4	0.03			1718.27	2.52	18.21	1.12	14.83	0.08	11:09:14
0	6.65	0	-91.15	-0.47	0.4	0			1719.38	1.11	18.02	-0.19	14.84	0.01	11:09:56

pH Min: 6.65

pH Max: 6.65

ORP Min: -91.15

ORP Max: -88.96

DO Min: 0.37

DO Max: 0.4

RDO Min:

RDO Max: 1715.75

Cond Min: 1719.59

Cond Max: 15.74

Turb Min: 19.29

Turb Max: 14.75

Temp Min: 14.88

Temp Max:

Notes:

Device Record:

In-Situ Inc. Troll 9000 Profiler XP

Report generated: 1/20/2007 10:56:49
Report from file: ...\\HARTFORD WORKING GROUP-07003-003095.15-007-HMW-26-070115-1-15-2007.flo.bin
Win-Situ® Version 4.57.0.0

Serial number: 45176
Firmware Version 2
Unit name: MP Troll 9000

Test name: LowFlow

Test defined on: 1/15/2007 10:58:41
Test started on: 1/15/2007 10:58:41
Test stopped on: N/A N/A

Data gathered using Event testing
Time between data points: 0.0 Seconds.
Time between default storages: 0.0 Seconds.
Monitoring data on channel [1]
Data stored if delta value exceeds: 0 Celsius
Number of data samples: 17

TOTAL DATA SAMPLES 17

Channel number [1]
Measurement type: Temperature
Channel name:

Channel number [3]
Measurement type: Barometric Pressure
Channel name:

Channel number [4]
Measurement type: Turbidity
Channel name:

Channel number [5]
Measurement type: Battery Voltage
Channel name:

Channel number [11]
Measurement type: ORP
Channel name:

Channel number [12]
Measurement type: pH
Channel name:

Channel number [25]
Measurement type: Dissolved Oxygen
Channel name:

Channel number [25]
Measurement type:
Channel name:

Dissolved Oxygen %Saturation

Channel number [45]
Measurement type:
Channel name:

Conductivity, Low Range

Date	Time	ET (sec)	Chan[1]	Chan[3]	Chan[4]	Chan[5]	Chan[11]	Chan[12]	Chan[25]	Chan[25]	Chan[45]
			Temperature Celsius	Barometric Inches Hg	Turbidity NTU	Battery Volts	ORP millivolts	pH pH	Clark DO milligrams/L	Clark DO Sat %Saturation	Conductivity microSiemens/cm
1/15/2007	10:58:41	0	10.03	29.658	31.6	2.785	-88	6.85	13.08	117.6574	1262.86
1/15/2007	10:59:23	42	13.73	29.66	29.4	2.811	-78	6.65	5.53	54.0692	1351.33
1/15/2007	11:00:05	84	14.51	29.663	28.3	2.811	-78	6.63	2.51	24.9461	1368.24
1/15/2007	11:00:47	126	14.71	29.664	35.4	2.785	-80	6.63	1.45	14.4552	1376.04
1/15/2007	11:01:30	169	14.7	29.665	25.7	2.785	-82	6.64	0.97	9.7117	1381.84
1/15/2007	11:02:13	212	14.54	29.664	25.1	2.785	-83	6.64	0.73	7.288	1381.01
1/15/2007	11:02:54	253	14.67	29.666	28.1	2.785	-84	6.64	0.55	5.4922	1380.18
1/15/2007	11:03:37	296	14.88	29.669	24.7	2.811	-85	6.64	0.51	5.0899	1383.92
1/15/2007	11:04:20	339	15.01	29.673	24.6	2.811	-86	6.64	0.45	4.5667	1389.79
1/15/2007	11:05:01	380	15	29.674	21	2.785	-87	6.64	0.39	3.9289	1389.37
1/15/2007	11:05:43	422	14.93	29.674	17.2	2.811	-88	6.65	0.4	4.0369	1391.48
1/15/2007	11:06:26	465	15.03	29.672	17.7	2.785	-88	6.65	0.37	3.7077	1389.37
1/15/2007	11:07:09	508	14.88	29.674	19.3	2.785	-89	6.65	0.37	3.7327	1386.44
1/15/2007	11:07:50	549	14.88	29.674	15.7	2.785	-90	6.65	0.4	4.0156	1387.28
1/15/2007	11:08:33	592	14.75	29.678	17.1	2.811	-90	6.65	0.37	3.7135	1379.77
1/15/2007	11:09:14	633	14.83	29.681	18.2	2.811	-91	6.65	0.4	4.0333	1384.35
1/15/2007	11:09:56	675	14.84	29.683	18	2.811	-91	6.65	0.4	4.0365	1385.6

INSTRUCTIONS: This is the raw data export format from the Win-Situ® Low Flow Cell data file: HARTFORD SENTINEL WELL SAMLING-07003-003095.15-007-HARTFORD WORKING GROUP-HMW-27-070115-1-15-2007.flo To Generate a report insert a new sheet based on a sheet template. See 'Sheet Template' and 'Insert a new sheet that's based on a custom template' in Excel help. An example template, InSituLowFlow.xls, is provided by the Win-Situ® Installation. You may copy this template from the templates subfolder in

Operator Name: T_GRISEL
 Company Name: BV-CLAYTON
 Project Name: HARTFORD SENTINEL WELL SAMLING-07003-003095.15-007
 Site Name: HARTFORD WORKING GROUP
 Well ID: HMW-27-070115

pH Sensor:	Installed	Target Value	0.1 [pH]	Target Percent	0 [%]
ORP Sensor:	Installed	Target Value	10 [mV]	Target Percent	0 [%]
DO Sensor:	Installed	Target Value	0.3 [mg/L]	Target Percent	0 [%]
Cond Sensor:	Installed	Target Value	0.1 [μ S/cm]	Target Percent	3 [%]
Turb Sensor:	Installed	Target Value	1 [NTU]	Target Percent	10 [%]

Pump Model/Type: DEDICATED
 Tubing Type: POLYETHYLENE
 Tubing Diam: 0.17 [in]
 Tubing Length: 34 [ft]
 Well Depth: 35.03 [ft]
 Well Diam: 2 [in]
 Screen Len: 176.4 [in]
 Screen Depth: 24.62 [ft]
 Pump Inlet Depth: 0 [in]
 Depth to Water: 33.16 [ft]
 Pump Level (TOC): 34 [ft]

Final Pumping Rate: 180 [mL/min]
 Stable Draw Down: 0.1 [ft]
 Total Volume Formula: Volume = cup (200 mL) + tubing (151.8 mL) - pH_ORP (16 mL) - DO (14 mL) - Cond (13 mL) - Turb (40 mL)
 Calculated Total Volume: 268.76 [mL]
 Actual Total Volume: 268.76 [mL]
 Calculated Measurement Interval: 90 [sec]
 Actual Measurement Interval: 90 [sec]

Start date/time: 1/15/2007 14:47:04
 End date/time: 1/15/2007 14:59:55
 Total Time: 0:12:51

Reading #	pH [pH]	Variance	ORP [mV]	Variance	DO [mg/L]	Variance	RDO []	Variance	Cond [μ S/cm]	Variance	Turb [NTU]	Variance	Temp [C]	Variance	Time
4	6.66	-0.01	9.24	-2.48	0.51	-0.13			1094.24	3.91	13.27	-2.15	14.73	0.25	14:53:16
3	6.66	-0.01	7.61	-1.63	0.47	-0.03			1099.76	5.51	11.54	-1.73	14.86	0.13	14:54:49
2	6.65	0	6.33	-1.29	0.47	0			1097.14	-2.62	10.54	-1	14.83	-0.03	14:56:23
1	6.65	0	5.68	-0.65	0.44	-0.03			1096.88	-0.26	6.41	-4.13	14.75	-0.08	14:57:56
0	6.65	0	4.78	-0.9	0.43	-0.01			1097.67	0.79	8.2	1.79	14.85	0.1	14:59:29

pH Min: 6.65
 pH Max: 6.66
 ORP Min: 4.78
 ORP Max: 9.24
 DO Min: 0.43
 DO Max: 0.51
 RDO Min:
 RDO Max:
 Cond Min: 1094.24
 Cond Max: 1099.76
 Turb Min: 6.41
 Turb Max: 13.27
 Temp Min: 14.73
 Temp Max: 14.86

Notes:

TURBIDITY</=10NTU

Device Record:

In-Situ Inc. Troll 9000 Profiler XP
Report generated: 1/20/2007 11:16:43
Report from file: ...HARTFORD SENTINEL WELL SAMLING-07003-003095.15-007-HARTFORD WORKING GROUP-HMW-27-070115-1-15-2007.flo.bin
Win-Situ® Version 4.57.0.0
Serial number: 45176
Firmware Version 2
Unit name: MP Troll 9000
Test name: LowFlow
Test defined on: 1/15/2007 14:47:04
Test started on: 1/15/2007 14:47:04
Test stopped on: N/A N/A
Data gathered using Event testing
Time between data points: 0.0 Seconds.
Time between default storages: 0.0 Seconds.
Monitoring data on channel [1]
Data stored if delta value exceeds: 0 Celsius
Number of data samples: 9

TOTAL DATA SAMPLES 9

Channel number [1]
Measurement type: Temperature
Channel name:

Channel number [3]
Measurement type: Barometric Pressure
Channel name:

Channel number [4]
Measurement type: Turbidity
Channel name:

Channel number [5]
Measurement type: Battery Voltage
Channel name:

Channel number [11]
Measurement type: ORP
Channel name:

Channel number [12]
Measurement type: pH
Channel name:

Channel number [25]
Measurement type: Dissolved Oxygen
Channel name:

Channel number [25]

Measurement type:

Channel name:

Dissolved Oxygen %Saturation

Channel number [45]

Measurement type:

Channel name:

Conductivity, Low Range

Date	Time	ET (sec)	Chan[1]	Chan[3]	Chan[4]	Chan[5]	Chan[11]	Chan[12]	Chan[25]	Chan[25]	Chan[45]
			Temperature Celsius	Barometric Inches Hg	Turbidity NTU	Battery Volts	ORP millivolts	pH	Clark DO milligrams/L	Clark DO Sat %Saturation	Conductivity microSiemens/cm
1/15/2007	14:47:04	0	6.03	29.676	34.9	2.811	41	6.85	16.51	134.47	930.7
1/15/2007	14:48:37	93	13.46	29.675	28.6	2.837	25	6.66	2.79	27.0954	1083.38
1/15/2007	14:50:09	185	14.08	29.677	24.4	2.811	16	6.67	1.04	10.2816	1090.59
1/15/2007	14:51:43	279	14.47	29.684	15.4	2.837	12	6.67	0.64	6.3217	1090.34
1/15/2007	14:53:16	372	14.73	29.69	13.3	2.811	9	6.66	0.51	5.0787	1094.24
1/15/2007	14:54:49	465	14.86	29.696	11.5	2.811	8	6.66	0.47	4.7504	1099.76
1/15/2007	14:56:23	559	14.83	29.698	10.5	2.811	6	6.65	0.47	4.7254	1097.13
1/15/2007	14:57:56	652	14.75	29.698	6.4	2.811	6	6.65	0.44	4.4283	1096.88
1/15/2007	14:59:29	745	14.85	29.7	8.2	2.811	5	6.65	0.43	4.334	1097.67

INSTRUCTIONS: This is the raw data export format from the Win-Situ® Low Flow Cell data file:HARTFORD SENTINEL WELL SAMLING-07003-003095.15-007-HARTFORD WORKING GROUP-HMW-28-070115-1-15-2007.flw To Generate a report insert a new sheet based on a sheet template. See 'Sheet Template' and 'Insert a new sheet that's based on a custom template' in Excel help. An example template, InSituLowFlow.xls, is provided by the Win-Situ® Installation. You may copy this template from the templates subfolder in

Operator Name: T_GRISEL
 Company Name: BV-CLAYTON
 Project Name: HARTFORD SENTINEL WELL SAMLING-07003-003095.15-007
 Site Name: HARTFORD WORKING GROUP
 Well ID: HMW-28-070115

pH Sensor:	Installed	Target Value	0.1 [pH]	Target Percent	0 [%]
ORP Sensor:	Installed	Target Value	10 [mV]	Target Percent	0 [%]
DO Sensor:	Installed	Target Value	0.3 [mg/L]	Target Percent	0 [%]
Cond Sensor:	Installed	Target Value	0.1 [μ S/cm]	Target Percent	3 [%]
Turb Sensor:	Installed	Target Value	1 [NTU]	Target Percent	10 [%]

Pump Model/Type:	DEDICATED
Tubing Type:	POLYETHYLENE
Tubing Diam:	0.17 [in]
Tubing Length:	35 [ft]
Well Depth:	36.02 [ft]
Well Diam:	2 [in]
Screen Len:	176.4 [in]
Screen Depth:	24.67 [ft]
Pump Inlet Depth:	0 [in]
Depth to Water:	33.11 [ft]
Pump Level (TOC):	34.5 [ft]

Final Pumping Rate:	330 [mL/min]
Stable Draw Down:	0.2 [ft]
Total Volume Formula:	Volume = cup (200 mL) + tubing (156.2 mL) - pH_ORP (16 mL) - DO (14 mL) - Cond (13 mL) - Turb (40 mL)
Calculated Total Volume:	273.22 [mL]
Actual Total Volume:	273.22 [mL]
Calculated Measurement Interval:	50 [sec]
Actual Measurement Interval:	50 [sec]

Start date/time:	1/15/2007 15:48:56
End date/time:	1/15/2007 15:56:49
Total Time:	0:07:53

Reading #	pH [pH]	Variance	ORP [mV]	Variance	DO [mg/L]	Variance	RDO []	Variance	Cond [μ S/cm]	Variance	Turb [NTU]	Variance	Temp [C]	Variance	Time
4	6.71	-0.03	145.16	-1.84	2.15	-3.02			919.32	9.48	1.35	0.04	14.19	1.12	15:52:45
3	6.71	0	143.32	-1.84	1.24	-0.91			924.7	5.37	2.28	0.93	13.93	-0.26	15:53:36
2	6.71	0	142.42	-0.9	0.85	-0.39			928.44	3.74	1.95	-0.33	14.13	0.2	15:54:28
1	6.71	0	141.3	-1.11	0.75	-0.1			930.52	2.07	1.52	-0.43	14.39	0.26	15:55:20
0	6.71	0	140.4	-0.9	0.63	-0.12			933.36	2.84	1.46	-0.06	14.19	-0.2	15:56:10

pH Min:	6.71
pH Max:	6.71
ORP Min:	140.4
ORP Max:	145.16
DO Min:	0.63
DO Max:	2.15
RDO Min:	
RDO Max:	
Cond Min:	919.32
Cond Max:	933.36
Turb Min:	1.35
Turb Max:	2.28
Temp Min:	13.93
Temp Max:	14.39

Device Record:

In-Situ Inc. Troll 9000 Profiler XP

Report generated: 1/20/2007 11:13:30
Report from file: ...HARTFORD SENTINEL WELL SAMLING-07003-003095.15-007-HARTFORD WORKING GROUP-HMW-28-070115-1-15-2007.flb.bin
Win-Situ® Version 4.57.0.0

Serial number: 45176
Firmware Version 2
Unit name: MP Troll 9000

Test name: LowFlow

Test defined on: 1/15/2007 15:48:56
Test started on: 1/15/2007 15:48:56
Test stopped on: N/A N/A

Data gathered using Event testing
Time between data points: 0.0 Seconds.
Time between default storages: 0.0 Seconds.
Monitoring data on channel [1]
Data stored if delta value exceeds: 0 Celsius
Number of data samples: 8

TOTAL DATA SAMPLES 8

Channel number [1]
Measurement type: Temperature
Channel name:

Channel number [3]
Measurement type: Barometric Pressure
Channel name:

Channel number [4]
Measurement type: Turbidity
Channel name:

Channel number [5]
Measurement type: Battery Voltage
Channel name:

Channel number [11]
Measurement type: ORP
Channel name:

Channel number [12]
Measurement type: pH
Channel name:

Channel number [25]
Measurement type: Dissolved Oxygen
Channel name:

Channel number [25]
Measurement type:
Channel name:

Dissolved Oxygen %Saturation

Channel number [45]
Measurement type:
Channel name:

Conductivity, Low Range

Date	Time	ET (sec)	Chan[1]	Chan[3]	Chan[4]	Chan[5]	Chan[11]	Chan[12]	Chan[25]	Chan[25]	Chan[45]
			Temperature Celsius	Barometric Inches Hg	Turbidity NTU	Battery Volts	ORP millivolts	pH	Clark DO milligrams/L	Clark DO Sat %Saturation	Conductivity microSiemens/cm
1/15/2007	15:48:56	0	-0.21	29.704	3.9	2.811	144	8.95	16.17	110.7747	1.38
1/15/2007	15:51:02	126	11.3	29.708	1.5	2.811	150	7.04	12.82	118.3157	862.16
1/15/2007	15:51:53	177	13.07	29.708	1.3	2.811	147	6.74	5.18	49.7612	909.85
1/15/2007	15:52:45	229	14.19	29.71	1.3	2.811	145	6.71	2.15	21.211	919.32
1/15/2007	15:53:36	280	13.93	29.711	2.3	2.811	143	6.71	1.24	12.1614	924.7
1/15/2007	15:54:28	332	14.13	29.713	1.9	2.811	142	6.71	0.85	8.354	928.44
1/15/2007	15:55:20	384	14.39	29.716	1.5	2.811	141	6.71	0.75	7.3997	930.52
1/15/2007	15:56:10	434	14.19	29.721	1.5	2.811	140	6.71	0.63	6.2316	933.36

INSTRUCTIONS: This is the raw data export format from the Win-Situ® Low Flow Cell data file: HARTFORD SENTINEL WELL SAMLING-07003-003095.15-007-HARTFORD WORKING GROUP-HMW-29-070116-1-16-2007.flo To Generate a report insert a new sheet based on a sheet template. See 'Sheet Template' and 'Insert a new sheet that's based on a custom template' in Excel help. An example template, InSituLowFlow.xls, is provided by the Win-Situ® Installation. You may copy this template from the templates subfolder in

Operator Name: T_GRISEL
 Company Name: BV-CLAYTON
 Project Name: HARTFORD SENTINEL WELL SAMLING-07003-003095.15-007
 Site Name: HARTFORD WORKING GROUP
 Well ID: HMW-29-070116

pH Sensor:	Installed	Target Value	0.1 [pH]	Target Percent	0 [%]
ORP Sensor:	Installed	Target Value	10 [mV]	Target Percent	0 [%]
DO Sensor:	Installed	Target Value	0.3 [mg/L]	Target Percent	0 [%]
Cond Sensor:	Installed	Target Value	0.1 [μ S/cm]	Target Percent	3 [%]
Turb Sensor:	Installed	Target Value	1 [NTU]	Target Percent	10 [%]

Pump Model/Type: DEDICATED
 Tubing Type: POLYETHYLENE
 Tubing Diam: 0.17 [in]
 Tubing Length: 33.5 [ft]
 Well Depth: 34.55 [ft]
 Well Diam: 2 [in]
 Screen Len: 176.4 [in]
 Screen Depth: 24.86 [ft]
 Pump Inlet Depth: 0 [in]
 Depth to Water: 31.47 [ft]
 Pump Level (TOC): 33.5 [ft]

Final Pumping Rate: 270 [mL/min]
 Stable Draw Down: 0.37 [ft]
 Total Volume Formula: Volume = cup (200 mL) + tubing (149.5 mL) - pH_ORP (16 mL) - DO (14 mL) - Cond (13 mL) - Turb (40 mL)
 Calculated Total Volume: 266.53 [mL]
 Actual Total Volume: 266.53 [mL]
 Calculated Measurement Interval: 60 [sec]
 Actual Measurement Interval: 60 [sec]

Start date/time: 1/16/2007 9:49:32
 End date/time: 1/16/2007 10:06:30
 Total Time: 0:16:58

Reading #	pH [pH]	Variance	ORP [mV]	Variance	DO [mg/L]	Variance	RDO []	Variance	Cond [μ S/cm]	Variance	Turb [NTU]	Variance	Temp [C]	Variance	Time
4	6.69	0	-60.62	-0.81	0.52	0			812.84	0.86	22.41	-1.72	14.83	0.03	10:01:55
3	6.7	0	-61.17	-0.56	0.47	-0.05			812.84	0	20.51	-1.9	14.8	-0.03	10:02:57
2	6.7	0	-61.73	-0.56	0.52	0.05			811.97	-0.86	15.14	-5.37	14.84	0.04	10:03:59
1	6.7	0	-62.24	-0.51	0.52	0			812.12	0.14	14.89	-0.24	14.74	-0.1	10:05:01
0	6.7	0	-62.93	-0.68	0.53	0.01			810.11	-2	13.82	-1.07	14.53	-0.21	10:06:03

pH Min: 6.69
 pH Max: 6.7
 ORP Min: -62.93
 ORP Max: -60.62
 DO Min: 0.47
 DO Max: 0.53
 RDO Min:
 RDO Max:
 Cond Min: 810.11
 Cond Max: 812.84
 Turb Min: 13.82
 Turb Max: 22.41
 Temp Min: 14.53
 Temp Max: 14.84

Notes:

Device Record:

In-Situ Inc. Troll 9000 Profiler XP

Report generated: 1/20/2007 11:11:06
Report from file: ...HARTFORD SENTINEL WELL SAMLING-07003-003095.15-007-HARTFORD WORKING GROUP-HMW-29-070116-1-16-2007.flo.bin
Win-Situ® Version 4.57.0.0

Serial number: 45176
Firmware Version 2
Unit name: MP Troll 9000

Test name: LowFlow

Test defined on: 1/16/2007 9:49:32
Test started on: 1/16/2007 9:49:32
Test stopped on: N/A N/A

Data gathered using Event testing
Time between data points: 0.0 Seconds.
Time between default storages: 0.0 Seconds.
Monitoring data on channel [1]
Data stored if delta value exceeds: 0 Celsius
Number of data samples: 17

TOTAL DATA SAMPLES 17

Channel number [1]
Measurement type: Temperature
Channel name:

Channel number [3]
Measurement type: Barometric Pressure
Channel name:

Channel number [4]
Measurement type: Turbidity
Channel name:

Channel number [5]
Measurement type: Battery Voltage
Channel name:

Channel number [11]
Measurement type: ORP
Channel name:

Channel number [12]
Measurement type: pH
Channel name:

Channel number [25]
Measurement type: Dissolved Oxygen
Channel name:

Channel number [25]
Measurement type:
Channel name:

Dissolved Oxygen %Saturation

Channel number [45]
Measurement type:
Channel name:

Conductivity, Low Range

Date	Time	ET (sec)	Chan[1]	Chan[3]	Chan[4]	Chan[5]	Chan[11]	Chan[12]	Chan[25]	Chan[25]	Chan[45]
			Temperature Celsius	Barometric Inches Hg	Turbidity NTU	Battery Volts	ORP millivolts	pH pH	Clark DO milligrams/L	Clark DO Sat %Saturation	Conductivity microSiemens/cm
1/16/2007	9:49:32	0	10.66	30.131	100.3	2.785	72	6.77	11.43	102.4208	731.39
1/16/2007	9:50:33	61	14.5	30.133	78.8	2.785	-4	6.68	3.1	30.2744	776.09
1/16/2007	9:51:35	123	14.68	30.136	72.3	2.785	-23	6.69	1.64	16.0566	785.23
1/16/2007	9:52:37	185	14.64	30.137	76.1	2.785	-36	6.69	1.15	11.2609	794.18
1/16/2007	9:53:40	248	14.69	30.141	65.1	2.811	-44	6.69	0.9	8.8503	801.66
1/16/2007	9:54:43	311	14.65	30.143	54.5	2.785	-49	6.69	0.67	6.5881	805.16
1/16/2007	9:55:44	372	14.7	30.145	50	2.785	-53	6.69	0.61	6.0197	808.7
1/16/2007	9:56:46	434	14.81	30.149	42.2	2.785	-55	6.69	0.56	5.4836	811.41
1/16/2007	9:57:48	496	14.81	30.151	37.5	2.785	-57	6.69	0.52	5.1273	812.12
1/16/2007	9:58:50	558	14.79	30.153	38	2.811	-58	6.69	0.51	5.0092	811.4
1/16/2007	9:59:51	619	14.8	30.156	29.9	2.811	-59	6.69	0.53	5.2371	811.69
1/16/2007	10:00:54	682	14.79	30.157	24.1	2.811	-60	6.69	0.53	5.1577	811.97
1/16/2007	10:01:55	743	14.83	30.161	22.4	2.811	-61	6.69	0.52	5.1501	812.84
1/16/2007	10:02:57	805	14.8	30.161	20.5	2.811	-61	6.7	0.47	4.6127	812.84
1/16/2007	10:03:59	867	14.84	30.16	15.1	2.811	-62	6.7	0.52	5.1104	811.97
1/16/2007	10:05:01	929	14.74	30.161	14.9	2.785	-62	6.7	0.52	5.1282	812.12
1/16/2007	10:06:03	991	14.53	30.161	13.8	2.811	-63	6.7	0.53	5.1647	810.11

INSTRUCTIONS: This is the raw data export format from the Win-Situ® Low Flow Cell data file: HARTFORD QUARTERLY GROUNDWATER SAMLING-07003-003095.17-001-HARTFORD WORKING GROUP-HMW-39C-070115-1-15-2007.flw To Generate a report insert a new sheet based on a sheet template. See 'Sheet Template' and 'Insert a new sheet that's based on a custom template' in Excel help. An example template, InSituLowFlow.xls, is provided by the Win-Situ® Installation. You may copy this template from the templates sub

Operator Name: T_GRISEL
 Company Name: BV-CLAYTON
 Project Name: HARTFORD QUARTERLY GROUNDWATER SAMLING-07003-003095.17-001
 Site Name: HARTFORD WORKING GROUP
 Well ID: HMW-39C-070115

pH Sensor:	Installed	Target Value	0.1 [pH]	Target Percent	0 [%]
ORP Sensor:	Installed	Target Value	10 [mV]	Target Percent	0 [%]
DO Sensor:	Installed	Target Value	0.3 [mg/L]	Target Percent	0 [%]
Cond Sensor:	Installed	Target Value	0.1 [μ S/cm]	Target Percent	3 [%]
Turb Sensor:	Installed	Target Value	1 [NTU]	Target Percent	10 [%]

Pump Model/Type: DEDICATED
 Tubing Type: POLYETHYLENE
 Tubing Diam: 0.17 [in]
 Tubing Length: 41 [ft]
 Well Depth: 42 [ft]
 Well Diam: 2 [in]
 Screen Len: 116.4 [in]
 Screen Depth: 31.73 [ft]
 Pump Inlet Depth: 0 [in]
 Depth to Water: 30.05 [ft]
 Pump Level (TOC): 32.05 [ft]

Final Pumping Rate: 210 [mL/min]
 Stable Draw Down: 0.1 [ft]
 Total Volume Formula: Volume = cup (200 mL) + tubing (183.0 mL) - pH_ORP (16 mL) - DO (14 mL) - Cond (13 mL) - Turb (40 mL)
 Calculated Total Volume: 300 [mL]
 Actual Total Volume: 300 [mL]
 Calculated Measurement Interval: 86 [sec]
 Actual Measurement Interval: 86 [sec]

Start date/time: 1/15/2007 13:02:40
 End date/time: 1/15/2007 13:16:27
 Total Time: 0:13:47

Reading #	pH [pH]	Variance	ORP [mV]	Variance	DO [mg/L]	Variance	RDO []	Variance	Cond [μ S/cm @25C]	Variance	Turb [NTU]	Variance	Temp [C]	Variance	Time
4	7.13	0.01	-77.23	-9.32	0.56	-0.08			1161.81	3.69	15.75	-6.71	14.04	-0.07	13:10:05
3	7.13	0	-82.32	-5.09	0.5	-0.05			1166.31	4.5	16.05	0.3	14.11	0.06	13:11:34
2	7.13	0	-86.12	-3.81	0.48	-0.02			1170.32	4	11.41	-4.64	14.07	-0.03	13:13:03
1	7.14	0	-89.03	-2.91	0.47	-0.01			1168.66	-1.65	11.62	0.21	13.97	-0.1	13:14:32
0	7.14	0	-91.13	-2.1	0.45	-0.02			1167.42	-1.24	10.53	-1.09	14.11	0.14	13:16:01

pH Min: 7.13
 pH Max: 7.14
 ORP Min: -91.13
 ORP Max: -77.23
 DO Min: 0.45
 DO Max: 0.56
 RDO Min:
 RDO Max:
 Cond Min: 1161.81
 Cond Max: 1170.32
 Turb Min: 10.53
 Turb Max: 16.05
 Temp Min: 13.97
 Temp Max: 14.11

Notes:

Device Record:

In-Situ Inc. Troll 9000 Profiler XP

Report generated: 1/20/2007 10:18:07
Report from file: ..\HARTFORD QUARTERLY GROUNDWATER SAMLING-07003-003095.17-001-HARTFORD WORKING GROUP-HMW-39C-070115-1-15-2007.flo.bin
Win-Situ® Version 4.57.0.0

Serial number: 45176
Firmware Version 2
Unit name: MP Troll 9000

Test name: LowFlow

Test defined on: 1/15/2007 13:02:40
Test started on: 1/15/2007 13:02:40
Test stopped on: N/A N/A

Data gathered using Event testing
Time between data points: 0.0 Seconds.
Time between default storages: 0.0 Seconds.
Monitoring data on channel [1]
Data stored if delta value exceeds: 0 Celsius
Number of data samples: 10

TOTAL DATA SAMPLES 10

Channel number [1]
Measurement type: Temperature
Channel name:

Channel number [3]
Measurement type: Barometric Pressure
Channel name:

Channel number [4]
Measurement type: Turbidity
Channel name:

Channel number [5]
Measurement type: Battery Voltage
Channel name:

Channel number [11]
Measurement type: ORP
Channel name:

Channel number [12]
Measurement type: pH
Channel name:

Channel number [25]
Measurement type: Dissolved Oxygen
Channel name:

Channel number [25]
Measurement type:
Channel name:

Dissolved Oxygen %Saturation

Channel number [45]
Measurement type:
Channel name:

Conductivity, Low Range

Date	Time	ET (sec)	Chan[1]	Chan[3]	Chan[4]	Chan[5]	Chan[11]	Chan[12]	Chan[25]	Chan[25]	Chan[45]
			Temperature Celsius	Barometric Inches Hg	Turbidity NTU	Battery Volts	ORP millivolts	pH	Clark DO milligrams/L	Clark DO Sat %Saturation	Conductivity microSiemens/cm
1/15/2007	13:02:40	0	13.92	29.648	71	2.785	6	7.16	6.15	60.2879	769.41
1/15/2007	13:04:09	89	14.22	29.653	64.8	2.785	-13	7.11	1.99	19.655	836.59
1/15/2007	13:05:38	178	13.9	29.652	50.2	2.811	-29	7.11	1.12	10.9986	857.54
1/15/2007	13:07:07	267	14.24	29.659	36	2.811	-51	7.11	0.79	7.775	892.39
1/15/2007	13:08:36	356	14.11	29.66	22.5	2.785	-68	7.12	0.64	6.2578	917.18
1/15/2007	13:10:05	445	14.04	29.662	15.8	2.811	-77	7.13	0.56	5.4762	918.65
1/15/2007	13:11:34	534	14.11	29.664	16.1	2.811	-82	7.13	0.5	4.9546	923.65
1/15/2007	13:13:03	623	14.07	29.666	11.4	2.785	-86	7.13	0.48	4.7322	926.07
1/15/2007	13:14:32	712	13.97	29.666	11.6	2.811	-89	7.14	0.47	4.6136	922.54
1/15/2007	13:16:01	801	14.11	29.667	10.5	2.811	-91	7.14	0.45	4.4103	924.59

INSTRUCTIONS: This is the raw data export format from the Win-Situ® Low Flow Cell data file HARTFORD QUARTERLY GROUNDWATER SAMLING-07003-003095.17-001. To Generate a report insert a new sheet based on a sheet template. See 'Sheet Template' and 'Insert a new sheet that's based on a custom template' in Excel help. An example template, InSituLowFlow.xls, is provided by the Win-Situ® Installation. You may copy this template from the templates sub

Operator Name: T_GRISEL
 Company Name: BV-CLAYTON
 Project Name: HARTFORD QUARTERLY GROUNDWATER SAMLING-07003-003095.17-001
 Site Name: HARTFORD WORKING GROUP
 Well ID: HMW-40C-070116

pH Sensor:	Installed	Target Value	0.1 [pH]	Target Percent	0 [%]
ORP Sensor:	Installed	Target Value	10 [mV]	Target Percent	0 [%]
DO Sensor:	Installed	Target Value	0.3 [mg/L]	Target Percent	0 [%]
Cond Sensor:	Installed	Target Value	0.1 [μ S/cm]	Target Percent	3 [%]
Turb Sensor:	Installed	Target Value	1 [NTU]	Target Percent	10 [%]

Pump Model/Type: DEDICATED
 Tubing Type: POLYETHYLENE
 Tubing Diam: 0.17 [in]
 Tubing Length: 39 [ft]
 Well Depth: 39 [ft]
 Well Diam: 2 [in]
 Screen Len: 176.4 [in]
 Screen Depth: 23.49 [ft]
 Pump Inlet Depth: 0 [in]
 Depth to Water: 28.56 [ft]
 Pump Level (TOC): 30.5 [ft]

Final Pumping Rate: 400 [mL/min]
 Stable Draw Down: 0.1 [ft]
 Total Volume Formula: Volume = cup (200 mL) + tubing (174.1 mL) - pH_ORP (16 mL) - DO (14 mL) - Cond (13 mL) - Turb (40 mL)
 Calculated Total Volume: 291.07 [mL]
 Actual Total Volume: 291.07 [mL]
 Calculated Measurement Interval: 44 [sec]
 Actual Measurement Interval: 44 [sec]

Start date/time: 1/16/2007 11:17:55
 End date/time: 1/16/2007 11:24:29
 Total Time: 0:06:34

Reading #	pH [pH]	Variance	ORP [mV]	Variance	DO [mg/L]	Variance	RDO []	Variance	Cond [μ S/cm]	Variance	Turb [NTU]	Variance	Temp [C]	Variance	Time	
4	6.42	-0.03	5.76	2.62	0.73	-0.18			693.9		1.15	479.87	21.6	15.16	0.05	11:20:56
3	6.37	-0.04	9.62	3.86	0.63	-0.1			695.79		1.89	447.07	-32.8	15.22	0.06	11:21:41
2	6.39	0.02	8.47	-1.15	0.57	-0.07			696.42		0.63	514.96	67.89	15.25	0.03	11:22:26
1	6.37	-0.02	9.8	1.33	0.52	-0.05			700.88		4.46	555.98	41.03	15.45	0.2	11:23:11
0	6.36	-0.01	10.53	0.73	0.48	-0.03			699.06		-1.81	564.75	8.76	15.23	-0.22	11:23:58

pH Min: 6.36
 pH Max: 6.42
 ORP Min: 5.76
 ORP Max: 10.53
 DO Min: 0.48
 DO Max: 0.73
 RDO Min:
 RDO Max:
 Cond Min: 693.9
 Cond Max: 700.88
 Turb Min: 447.07
 Turb Max: 564.75
 Temp Min: 15.16
 Temp Max: 15.45

Notes:

Device Record:

In-Situ Inc. Troll 9000 Profiler XP

Report generated: 1/20/2007 10:21:39
Report from file: ...\\HARTFORD QUARTERLY GROUNDWATER SAMLING-07003-003095.17-001-HARTFORD WORKING GROUP-HMW-40C-070116-1-16-2007.flo.bin
Win-Situ® Version 4.57.0.0

Serial number: 45176
Firmware Version 2
Unit name: MP Troll 9000

Test name: LowFlow

Test defined on: 1/16/2007 11:17:55
Test started on: 1/16/2007 11:17:55
Test stopped on: N/A N/A

Data gathered using Event testing
Time between data points: 0.0 Seconds.
Time between default storages: 0.0 Seconds.
Monitoring data on channel [1]
Data stored if delta value exceeds: 0 Celsius
Number of data samples: 9

TOTAL DATA SAMPLES 9

Channel number [1]
Measurement type: Temperature
Channel name:

Channel number [3]
Measurement type: Barometric Pressure
Channel name:

Channel number [4]
Measurement type: Turbidity
Channel name:

Channel number [5]
Measurement type: Battery Voltage
Channel name:

Channel number [11]
Measurement type: ORP
Channel name:

Channel number [12]
Measurement type: pH
Channel name:

Channel number [25]
Measurement type: Dissolved Oxygen
Channel name:

Channel number [25]
Measurement type:
Channel name:

Dissolved Oxygen %Saturation

Channel number [45]
Measurement type:
Channel name:

Conductivity, Low Range

Date	Time	ET (sec)	Chan[1]	Chan[3]	Chan[4]	Chan[5]	Chan[11]	Chan[12]	Chan[25]	Chan[25]	Chan[45]
			Temperature Celsius	Barometric Inches Hg	Turbidity NTU	Battery Volts	ORP millivolts	pH	Clark DO milligrams/L	Clark DO Sat %Saturation	Conductivity microSiemens/cm
1/16/2007	11:17:55	0	13.37	30.147	468.4	2.811	-32	6.86	8.26	78.6789	657.3
1/16/2007	11:18:40	45	15.07	30.15	425.2	2.811	-7	6.51	2.45	24.245	689.95
1/16/2007	11:19:25	90	14.69	30.15	446.3	2.811	-1	6.49	1.3	12.7889	688.81
1/16/2007	11:20:10	135	15.11	30.152	458.3	2.811	3	6.44	0.92	9.0665	692.75
1/16/2007	11:20:56	181	15.16	30.155	479.9	2.785	6	6.42	0.73	7.2719	693.9
1/16/2007	11:21:41	226	15.22	30.155	447.1	2.785	10	6.37	0.63	6.2859	695.79
1/16/2007	11:22:26	271	15.25	30.155	515	2.837	8	6.39	0.57	5.6167	696.42
1/16/2007	11:23:11	316	15.45	30.156	556	2.811	10	6.37	0.52	5.149	700.88
1/16/2007	11:23:58	363	15.23	30.157	564.7	2.811	11	6.36	0.48	4.7948	699.06

INSTRUCTIONS: This is the raw data export format from the Win-Situ® Low Flow Cell data file:Hartford Quarterly Groundwater Sampling-07003-003095.17-001-Hartford Working Group-HMW-49C-1-16-2007.flo To Generate a report insert a new sheet based on a sheet template. See 'Sheet Template' and 'Insert a new sheet that's based on a custom template' in Excel help. An example template, InSituLowFlow.xls, is provided by the Win-Situ® Installation. You may copy this template from the templates subfolder

Operator Name: N_DENNIS
 Company Name: BV-Clayton
 Project Name: Hartford Quarterly Groundwater Sampling-07003-003095.17-001
 Site Name: Hartford Working Group
 Well ID: HMW-49C/070116

pH Sensor:	Installed	Target Value	0.1 [pH]	Target Percent	0 [%]
ORP Sensor:	Installed	Target Value	10 [mV]	Target Percent	0 [%]
DO Sensor:	Installed	Target Value	0.3 [mg/L]	Target Percent	0 [%]
Cond Sensor:	Installed	Target Value	0.1 [μ S/cm]	Target Percent	3 [%]
Turb Sensor:	Installed	Target Value	1 [NTU]	Target Percent	10 [%]

Pump Model/Type: 11035
 Tubing Type: polyethylene
 Tubing Diam: 0.17 [in]
 Tubing Length: 40 [ft]
 Well Depth: 39.5 [ft]
 Well Diam: 2 [in]
 Screen Len: 111.6 [in]
 Screen Depth: 29.59 [ft]
 Pump Inlet Depth: 0 [in]
 Depth to Water: 32.7 [ft]
 Pump Level (TOC): 34.7 [ft]

Final Pumping Rate: 376 [mL/min]
 Stable Draw Down: 0 [ft]

Total Volume Formula: Volume = cup (200 mL) + tubing (178.5 mL) - pH_ORP (16 mL) - DO (14 mL) - Cond (13 mL) - Turb (40 mL)

Calculated Total Volume: 295.54 [mL]
 Actual Total Volume: 295.54 [mL]

Calculated Measurement Interval: 48 [sec]
 Actual Measurement Interval: 48 [sec]

Start date/time: 1/16/2007 10:59:20
 End date/time: 1/16/2007 11:32:53
 Total Time: 0:33:33

Reading #	pH [pH]	Variance	ORP [mV]	Variance	DO [mg/L]	Variance	RDO []	Variance	Cond [μ S/cm]	Variance	Turb [NTU]	Variance	Temp [C]	Variance	Time
4	6.62	0	-8.39	0.39	4.35	-0.79			772.26	-4.66	21.01	-11.82	14.92	-0.26	11:29:00
3	6.61	0	-7.61	0.78	5.01	0.66			766.9	-5.36	18.52	-2.49	14.7	-0.22	11:29:50
2	6.61	-0.01	-7.22	0.39	5.05	0.04			770.98	4.08	25.98	7.46	14.83	0.14	11:30:39
1	6.61	0	-7.01	0.21	5.1	0.05			769.83	-1.15	16.46	-9.53	14.95	0.12	11:31:28
0	6.61	0	-6.02	0.99	5.04	-0.05			771.88	2.05	17.29	0.83	14.92	-0.03	11:32:18

pH Min: 6.61
 pH Max: 6.62
 ORP Min: -8.39
 ORP Max: -6.02
 DO Min: 4.35
 DO Max: 5.1
 RDO Min:
 RDO Max:
 Cond Min: 766.9
 Cond Max: 772.26
 Turb Min: 16.46
 Turb Max: 25.98
 Temp Min: 14.7
 Temp Max: 14.95

Device Record:

In-Situ Inc. Troll 9000 Pro XP

Report generated: 1/20/2007 10:49:18
Report from file: ...\\Hartford Quarterly Groundwater Sampling-07003-003095.17-001-Hartford Working Group-HMW-49C-1-16-2007.flo.bin
Win-Situ® Version 4.57.0.0

Serial number: 45174
Firmware Version 2
Unit name: MP Troll 9000

Test name: LowFlow

Test defined on: 1/16/2007 10:59:20
Test started on: 1/16/2007 10:59:20
Test stopped on: N/A N/A

Data gathered using Event testing
Time between data points: 0.0 Seconds.
Time between default storage: 0.0 Seconds.
Monitoring data on channel [1]
Data stored if delta value exceeds: 0 Celsius
Number of data samples: 41

TOTAL DATA SAMPLES 41

Channel number [1]
Measurement type: Temperature
Channel name:

Channel number [3]
Measurement type: Barometric Pressure
Channel name:

Channel number [4]
Measurement type: Turbidity
Channel name:

Channel number [5]
Measurement type: Battery Voltage
Channel name:

Channel number [11]
Measurement type: ORP
Channel name:

Channel number [12]
Measurement type: pH
Channel name:

Channel number [25]
Measurement type: Dissolved Oxygen
Channel name:

Channel number [25]

Measurement type:

Channel name:

Dissolved Oxygen %Saturation

Channel number [45]

Measurement type:

Channel name:

Conductivity, Low Range

Date	Time	ET (sec)	Chan[1]	Chan[3]	Chan[4]	Chan[5]	Chan[11]	Chan[12]	Chan[25]	Chan[25]	Chan[45]
			Temperature Celsius	Barometric Inches Hg	Turbidity NTU	Battery Volts	ORP millivolts	pH	Clark DO milligrams/L	Clark DO Sat %Saturation	Conductivity microSiemens/cm
1/16/2007	10:59:20	0	14.63	30.151	68.6	2.811	-44	6.64	2.52	24.7023	746.25
1/16/2007	11:00:09	49	16.32	30.151	61	2.785	-46	6.63	7.34	74.5036	781.34
1/16/2007	11:00:59	99	16.3	30.153	40	2.863	-47	6.62	7.78	78.9254	777.8
1/16/2007	11:01:48	148	16.37	30.155	48.7	2.863	-49	6.62	7.62	77.4483	789.19
1/16/2007	11:02:38	198	16.53	30.155	58.8	2.811	-51	6.63	7.39	75.3737	791.35
1/16/2007	11:03:27	247	16.57	30.158	56.3	2.811	-54	6.63	7.21	73.5292	801.61
1/16/2007	11:04:16	296	16.57	30.158	75.4	2.811	-57	6.63	7.09	72.3094	809.87
1/16/2007	11:05:06	346	16.26	30.159	64.8	2.811	-58	6.62	7.07	71.6445	807.34
1/16/2007	11:05:55	395	16.39	30.159	65.9	2.863	-59	6.62	6.98	70.9879	813.14
1/16/2007	11:06:45	445	16.4	30.16	65.9	2.863	-59	6.62	6.84	69.5587	817.3
1/16/2007	11:07:34	494	16.38	30.159	53.2	2.811	-59	6.62	6.69	68.0168	817.01
1/16/2007	11:08:24	544	16.47	30.16	62.3	2.837	-60	6.62	6.51	66.262	812.29
1/16/2007	11:09:13	593	15.99	30.16	79.7	2.811	-60	6.61	6.54	65.9557	803.57
1/16/2007	11:10:03	643	16.15	30.158	83.1	2.863	-60	6.61	6.35	64.1899	804.26
1/16/2007	11:10:52	692	16.35	30.16	99.4	2.889	-60	6.62	6.3	63.9578	807.49
1/16/2007	11:11:41	741	16.44	30.161	102.6	2.837	-60	6.62	6.24	63.4245	807.2
1/16/2007	11:12:31	791	16.49	30.164	154.7	2.889	-60	6.62	6.16	62.7015	807.77
1/16/2007	11:13:20	840	16.13	30.165	195.6	2.889	-57	6.62	5.5	55.5304	800.24
1/16/2007	11:14:10	890	15.58	30.164	210.8	2.863	-47	6.63	5.95	59.4573	792.31
1/16/2007	11:14:59	939	15.49	30.165	159.8	2.863	-38	6.65	6.22	62.0301	789.75
1/16/2007	11:15:49	989	15.36	30.164	174.6	2.837	-32	6.66	4.74	47.147	784.94
1/16/2007	11:16:38	1038	15.15	30.165	112.9	2.837	-28	6.68	6.27	62.0182	783.88
1/16/2007	11:17:28	1088	15.06	30.165	117.6	2.811	-25	6.68	6.2	61.2168	780.18
1/16/2007	11:18:17	1137	15.09	30.165	102.2	2.837	-23	6.68	5.79	57.2572	779.27
1/16/2007	11:19:06	1186	15.08	30.164	67.2	2.889	-20	6.67	5.85	57.78	779.01
1/16/2007	11:19:56	1236	15.13	30.165	60	2.863	-19	6.67	5.64	55.7573	779.66
1/16/2007	11:20:46	1286	15.11	30.163	50.8	2.837	-16	6.66	5.75	56.8724	778.61
1/16/2007	11:21:35	1335	14.96	30.163	59	2.863	-15	6.65	5.41	53.3208	775.23
1/16/2007	11:22:25	1385	14.95	30.165	41	2.863	-14	6.64	5.27	51.9483	778.88
1/16/2007	11:23:14	1434	14.91	30.163	34	2.889	-13	6.64	5.1	50.2049	772.9
1/16/2007	11:24:03	1483	15.04	30.162	47.1	2.863	-12	6.64	5.21	51.4442	775.62
1/16/2007	11:24:53	1533	14.83	30.162	27.5	2.837	-11	6.63	5.53	54.3431	772.52
1/16/2007	11:25:42	1582	14.82	30.162	25.1	2.863	-10	6.63	5.46	53.6932	769.06
1/16/2007	11:26:31	1631	15	30.163	27.9	2.811	-10	6.63	4.79	47.2256	774.45
1/16/2007	11:27:21	1681	15.17	30.165	24.9	2.863	-9	6.62	5.18	51.2759	777.7
1/16/2007	11:28:11	1731	15.18	30.165	32.8	2.863	-9	6.62	5.15	50.948	776.92
1/16/2007	11:29:00	1780	14.92	30.162	21	2.863	-8	6.62	4.35	42.8493	772.26
1/16/2007	11:29:50	1830	14.7	30.159	18.5	2.837	-8	6.61	5.01	49.14	766.9
1/16/2007	11:30:39	1879	14.83	30.159	26	2.863	-7	6.61	5.05	49.6469	770.98
1/16/2007	11:31:28	1928	14.95	30.161	16.5	2.863	-7	6.61	5.1	50.2211	769.83
1/16/2007	11:32:18	1978	14.92	30.158	17.3	2.837	-6	6.61	5.04	49.6864	771.88

INSTRUCTIONS: This is the raw data export format from the Win-Situ® Low Flow Cell data file: Hartford Quarterly Groundwater Sampling-07003-003095.17-001-Hartford Working Group-HMW-49D-1-16-2007.flw To Generate a report insert a new sheet based on a sheet template. See 'Sheet Template' and 'Insert a new sheet that's based on a custom template' in Excel help. An example template, InSituLowFlow.xls, is provided by the Win-Situ® Installation. You may copy this template from the templates subfolder

Operator Name: N_DENNIS
 Company Name: BV-Clayton
 Project Name: Hartford Quarterly Groundwater Sampling-07003-003095.17-001
 Site Name: Hartford Working Group
 Well ID: HMW-49D/070116

pH Sensor:	Installed	Target Value	0.1 [pH]	Target Percent	0 [%]
ORP Sensor:	Installed	Target Value	10 [mV]	Target Percent	0 [%]
DO Sensor:	Installed	Target Value	0.3 [mg/L]	Target Percent	0 [%]
Cond Sensor:	Installed	Target Value	0.1 [μ S/cm]	Target Percent	3 [%]
Turb Sensor:	Installed	Target Value	1 [NTU]	Target Percent	10 [%]

Pump Model/Type: 11035
 Tubing Type: polyethylene

Tubing Diam:	0.17 [in]
Tubing Length:	51 [ft]
Well Depth:	51 [ft]
Well Diam:	2 [in]
Screen Len:	115.2 [in]
Screen Depth:	40.72 [ft]
Pump Inlet Depth:	0 [in]
Depth to Water:	34.57 [ft]
Pump Level (TOC):	40.72 [ft]

Final Pumping Rate:	460 [mL/min]
Stable Draw Down:	0.3 [ft]

Total Volume Formula:
 Volume = cup (200 mL) + tubing (227.6 mL) - pH_ORP (16 mL) - DO (14 mL) - Cond (13 mL) - Turb (40 mL)
 Calculated Total Volume: 344.64 [mL]
 Actual Total Volume: 344.64 [mL]
 Calculated Measurement Interval: 45 [sec]
 Actual Measurement Interval: 45 [sec]

Start date/time:	1/16/2007 12:57:00
End date/time:	1/16/2007 13:13:38
Total Time:	0:16:38

Reading #	pH [pH]	Variance	ORP [mV]	Variance	DO [mg/L]	Variance	RDO []	Variance	Cond [μ S/cm]	Variance	Turb [NTU]	Variance	Temp [C]	Variance	Time
4	6.63	0	-63.46	-1.53	3.88	-0.19			919.75	1.09	29.37	-0.06	15.57	-0.04	13:10:07
3	6.63	0	-64.74	-1.28	3.68	-0.2			921.95	2.19	30.48	1.11	15.59	0.01	13:10:55
2	6.64	0.01	-66.45	-1.71	3.53	-0.15			919.57	-2.38	30.15	-0.34	15.49	-0.1	13:11:41
1	6.64	0	-67.77	-1.32	3.4	-0.13			918.11	-1.46	32.36	2.22	15.42	-0.07	13:12:27
0	6.64	0	-69.05	-1.28	3.23	-0.17			919.75	1.64	31.41	-0.95	15.5	0.08	13:13:13

pH Min:	6.63
pH Max:	6.64
ORP Min:	-69.05
ORP Max:	-63.46
DO Min:	3.23
DO Max:	3.88
RDO Min:	
RDO Max:	
Cond Min:	918.11
Cond Max:	921.95
Turb Min:	29.37
Turb Max:	32.36
Temp Min:	15.42
Temp Max:	15.59

Notes:

Device Record:

In-Situ Inc. Troll 9000 Pro XP

Report generated: 1/20/2007 10:58:22
Report from file: ...\\Hartford Quarterly Groundwater Sampling-07003-003095.17-001-Hartford Working Group-HMW-49D-1-16-2007.fl0.bin
Win-Situ® Version 4.57.0.0

Serial number: 45174
Firmware Version 2
Unit name: MP Troll 9000

Test name: LowFlow

Test defined on: 1/16/2007 12:57:00
Test started on: 1/16/2007 12:57:00
Test stopped on: N/A N/A

Data gathered using Event testing
Time between data points: 0.0 Seconds.
Time between default storages: 0.0 Seconds.
Monitoring data on channel [1]
Data stored if delta value exceeds: 0 Celsius
Number of data samples: 22

TOTAL DATA SAMPLES 22

Channel number [1]
Measurement type: Temperature
Channel name:

Channel number [3]
Measurement type: Barometric Pressure
Channel name:

Channel number [4]
Measurement type: Turbidity
Channel name:

Channel number [5]
Measurement type: Battery Voltage
Channel name:

Channel number [11]
Measurement type: ORP
Channel name:

Channel number [12]
Measurement type: pH
Channel name:

Channel number [25]
Measurement type: Dissolved Oxygen
Channel name:

Channel number [25]
Measurement type:
Channel name:

Dissolved Oxygen %Saturation

Channel number [45]
Measurement type:
Channel name:

Conductivity, Low Range

Date	Time	ET (sec)	Chan[1]	Chan[3]	Chan[4]	Chan[5]	Chan[11]	Chan[12]	Chan[25]	Chan[25]	Chan[45]
			Temperature Celsius	Barometric Inches Hg	Turbidity NTU	Battery Volts	ORP millivolts	pH pH	Clark DO milligrams/L	Clark DO Sat %Saturation	Conductivity microSiemens/cm
1/16/2007	12:57:00	0	15.32	30.114	11.7	2.863	-29	6.83	7.84	77.9405	624.98
1/16/2007	12:57:46	46	15.35	30.114	15.6	2.863	-31	6.8	7.85	78.1533	668.79
1/16/2007	12:58:33	93	15.44	30.115	20	2.837	-33	6.75	7.56	75.3525	721.66
1/16/2007	12:59:19	139	15.65	30.117	19.9	2.863	-36	6.73	7.16	71.7304	771.23
1/16/2007	13:00:05	185	15.65	30.121	22.4	2.863	-37	6.7	6.87	68.863	804.68
1/16/2007	13:00:51	231	15.55	30.123	22.5	2.863	-39	6.67	6.65	66.5071	830.33
1/16/2007	13:01:38	278	15.6	30.124	21.4	2.889	-41	6.66	6.37	63.764	850.74
1/16/2007	13:02:25	325	15.67	30.126	20.3	2.863	-43	6.65	6.11	61.2326	867.29
1/16/2007	13:03:10	370	15.55	30.126	18.3	2.837	-45	6.64	5.93	59.2671	879.29
1/16/2007	13:03:57	417	15.64	30.128	22.8	2.863	-47	6.65	5.67	56.8389	889.75
1/16/2007	13:04:44	464	15.63	30.13	22.3	2.837	-50	6.63	5.46	54.699	897.5
1/16/2007	13:05:30	510	15.68	30.132	27.1	2.889	-52	6.63	5.18	51.9534	904.33
1/16/2007	13:06:16	556	15.65	30.134	26.6	2.889	-54	6.62	4.94	49.4925	909.11
1/16/2007	13:07:02	602	15.68	30.135	27.6	2.889	-56	6.63	4.68	46.886	914.31
1/16/2007	13:07:49	649	15.65	30.136	28	2.889	-58	6.63	4.47	44.7809	918.84
1/16/2007	13:08:36	696	15.55	30.137	30.9	2.889	-60	6.63	4.27	42.7157	919.75
1/16/2007	13:09:21	741	15.61	30.138	29.4	2.863	-62	6.63	4.07	40.6829	918.66
1/16/2007	13:10:07	787	15.57	30.137	29.4	2.889	-63	6.63	3.88	38.7893	919.75
1/16/2007	13:10:55	835	15.59	30.138	30.5	2.863	-65	6.63	3.68	36.8266	921.94
1/16/2007	13:11:41	881	15.49	30.138	30.1	2.889	-66	6.64	3.53	35.2236	919.57
1/16/2007	13:12:27	927	15.42	30.135	32.4	2.889	-68	6.64	3.4	33.8869	918.11
1/16/2007	13:13:13	973	15.5	30.136	31.4	2.811	-69	6.64	3.23	32.2837	919.75

INSTRUCTIONS: This is the raw data export format from the Win-Situ® Low Flow Cell data file:Hartford Quarterly Groundwater Sampling-07003-003095.17-001-Hartford Working Group-HMW-50A-1-16-2007.flw To Generate a report insert a new sheet based on a sheet template. See 'Sheet Template' and 'Insert a new sheet that's based on a custom template' in Excel help. An example template, InSituLowFlow.xls, is provided by the Win-Situ® Installation. You may copy this template from the templates subfolder

Operator Name: N_DENNIS
 Company Name: BV-Clayton
 Project Name: Hartford Quarterly Groundwater Sampling-07003-003095.17-001
 Site Name: Hartford Working Group
 Well ID: HMW-50A/070116

pH Sensor:	Installed	Target Value	0.1 [pH]	Target Percent	0 [%]
ORP Sensor:	Installed	Target Value	10 [mV]	Target Percent	0 [%]
DO Sensor:	Installed	Target Value	0.3 [mg/L]	Target Percent	0 [%]
Cond Sensor:	Installed	Target Value	0.1 [μ S/cm]	Target Percent	3 [%]
Turb Sensor:	Installed	Target Value	1 [NTU]	Target Percent	10 [%]

Pump Model/Type: 11035
 Tubing Type: polyethylene
 Tubing Diam: 0.17 [in]
 Tubing Length: 30 [ft]
 Well Depth: 29.88 [ft]
 Well Diam: 2 [in]
 Screen Len: 111.6 [in]
 Screen Depth: 20.14 [ft]
 Pump Inlet Depth: 0 [in]
 Depth to Water: 12.79 [ft]
 Pump Level (TOC): 20.14 [ft]

Final Pumping Rate: 452 [mL/min]
 Stable Draw Down: 0.3 [ft]
 Total Volume Formula: Volume = cup (200 mL) + tubing (133.9 mL) - pH_ORP (16 mL) - DO (14 mL) - Cond (13 mL) - Turb (40 mL)
 Calculated Total Volume: 250.9 [mL]
 Actual Total Volume: 250.9 [mL]
 Calculated Measurement Interval: 34 [sec]
 Actual Measurement Interval: 34 [sec]

Start date/time: 1/16/2007 15:44:35
 End date/time: 1/16/2007 16:07:52
 Total Time: 0:23:17

Reading #	pH [pH]	Variance	ORP [mV]	Variance	DO [mg/L]	Variance	RDO []	Variance	Cond [μ S/cm]	Variance	Turb [NTU]	Variance	Temp [C]	Variance	Time
4	6.14	-0.01	39.16	2.18	2.85	-0.04			966.09	-0.2	17.78	-5.16	15.01	0.03	16:05:31
3	6.15	0.01	39.89	0.73	2.8	-0.05			963.09	-3.01	17.11	-0.67	14.82	-0.19	16:06:06
2	6.16	0.01	40.83	0.94	2.79	-0.01			959.1	-3.98	17.05	-0.06	14.55	-0.27	16:06:42
1	6.17	0	42.63	1.8	2.77	-0.02			954.17	-4.93	16.93	-0.12	14.36	-0.18	16:07:16
0	6.17	0	44.6	1.97	2.76	-0.01			948.12	-6.05	17.06	0.13	14.18	-0.19	16:07:51

pH Min: 6.14
 pH Max: 6.17
 ORP Min: 39.16
 ORP Max: 44.6
 DO Min: 2.76
 DO Max: 2.85
 RDO Min:
 RDO Max:
 Cond Min: 948.12
 Cond Max: 966.09
 Turb Min: 16.93
 Turb Max: 17.78
 Temp Min: 14.18
 Temp Max: 15.01

Device Record:

In-Situ Inc.

Troll 9000 Pro XP

Report generated:

1/20/2007 11:02:07

Report from file:

...Hartford Quarterly Groundwater Sampling-07003-003095.17-001-Hartford Working Group-HMW-50A-1-16-2007.flo.bin

4.57.0.0

Serial number:

45174

Firmware Version

2

Unit name:

MP Troll 9000

Test name:

LowFlow

Test defined on: 1/16/2007 15:44:35

Test started on: 1/16/2007 15:44:35

Test stopped on: N/A N/A

Data gathered using Event testing

Time between data points: 0.0 Seconds.

Time between default storages: 0.0 Seconds.

Monitoring data on channel [1]

Data stored if delta value exceeds: 0 Celsius

Number of data samples: 41

TOTAL DATA SAMPLES 41

Channel number [1]

Measurement type: Temperature

Channel name:

Channel number [3]

Measurement type: Barometric Pressure

Channel name:

Channel number [4]

Measurement type: Turbidity

Channel name:

Channel number [5]

Measurement type: Battery Voltage

Channel name:

Channel number [11]

Measurement type: ORP

Channel name:

Channel number [12]

Measurement type: pH

Channel name:

Channel number [25]

Measurement type: Dissolved Oxygen

Channel name:

Channel number [25]

Measurement type:

Channel name:

Dissolved Oxygen %Saturation

Channel number [45]

Measurement type:

Channel name:

Conductivity, Low Range

Date	Time	ET (sec)	Chan[1]	Chan[3]	Chan[4]	Chan[5]	Chan[11]	Chan[12]	Chan[25]	Chan[25]	Chan[45]
			Temperature Celsius	Barometric Inches Hg	Turbidity NTU	Battery Volts	ORP millivolts	pH pH	Clark DO milligrams/L	Clark DO %Sat	Sat Conductivity microSiemens/cm
											Actual Conductivity
1/16/2007	15:44:35	0	11.26	30.159	175.2	2.811	-52	-17.78	8.64	78.4992	797.28
1/16/2007	15:45:09	34	13.58	30.159	125.2	2.837	-43	-17.58	5.99	57.3559	867.54
1/16/2007	15:45:44	69	14.56	30.159	74.5	2.863	-39	-17.5	4.06	39.6902	881.9
1/16/2007	15:46:19	104	14.72	30.16	67.4	2.811	-37	-17.48	3.27	32.0968	885.77
1/16/2007	15:46:55	140	14.77	30.16	67.6	2.863	-35	-17.48	3.96	38.8655	892.25
1/16/2007	15:47:29	174	14.51	30.162	61.8	2.837	-34	-17.5	4.27	41.7353	898.65
1/16/2007	15:48:04	209	14.71	30.163	59.2	2.889	-29	-17.48	4.22	41.4172	898.83
1/16/2007	15:48:39	244	14.82	30.163	42.1	2.889	-26	-17.47	4.15	40.7585	900.57
1/16/2007	15:49:14	279	14.79	30.164	60.8	2.837	-24	-17.48	4.09	40.2232	902.86
1/16/2007	15:49:49	314	14.65	30.166	50.8	2.811	-21	-17.49	4.07	39.818	907.98
1/16/2007	15:50:24	349	14.8	30.167	44.1	2.837	-19	-9.62	3.95	38.8411	907.99
1/16/2007	15:51:00	385	14.85	30.168	40.7	2.889	-15	2.43	3.87	38.0611	913.17
1/16/2007	15:51:33	418	14.95	30.169	54.2	2.811	-13	4.3	3.78	37.2588	912.64
1/16/2007	15:52:08	453	14.87	30.17	43.2	2.811	-10	4.98	3.73	36.7221	921.53
1/16/2007	15:52:44	489	14.95	30.171	38	2.863	-9	5.38	3.66	36.0434	924.47
1/16/2007	15:53:18	523	14.95	30.173	37.7	2.837	-6	5.57	3.62	35.6374	923.92
1/16/2007	15:53:53	558	14.9	30.174	39.7	2.811	-3	5.7	3.56	35.0195	912.29
1/16/2007	15:54:28	593	14.94	30.175	33.8	2.837	-1	5.8	3.5	34.4868	933.97
1/16/2007	15:55:03	628	14.96	30.177	23.9	2.811	2	5.87	3.45	34.0156	934.54
1/16/2007	15:55:38	663	14.93	30.178	27.8	2.863	4	5.9	3.43	33.8243	933.97
1/16/2007	15:56:13	698	14.87	30.178	33.7	2.863	6	5.97	3.39	33.3979	927.44
1/16/2007	15:56:49	734	14.99	30.18	30.6	2.889	9	5.97	3.33	32.8612	940.42
1/16/2007	15:57:23	768	15.04	30.18	27.6	2.863	10	6.02	3.28	32.3666	944.82
1/16/2007	15:57:57	802	15.01	30.181	24.3	2.837	12	6.04	3.25	32.0857	947.53
1/16/2007	15:58:33	838	14.68	30.182	28.5	2.837	15	6.05	3.28	32.1164	936.05
1/16/2007	15:59:07	872	14.98	30.182	25.5	2.837	17	6.05	3.19	31.4409	949.86
1/16/2007	15:59:42	907	15.01	30.182	25.1	2.863	19	6.07	3.15	31.1014	955.14
1/16/2007	16:00:17	942	15.06	30.181	20	2.811	22	6.07	3.12	30.7847	952.79
1/16/2007	16:00:52	977	14.48	30.182	26.4	2.837	24	6.09	3.18	31.0634	957.31
1/16/2007	16:01:27	1012	14.95	30.181	25.7	2.837	26	6.1	3.06	30.1743	954.75
1/16/2007	16:02:02	1047	15.08	30.183	18.3	2.811	28	6.1	3.02	29.8292	958.9
1/16/2007	16:02:37	1082	15.03	30.183	18.1	2.837	29	6.13	3	29.6523	960.69
1/16/2007	16:03:11	1116	14.58	30.184	21.4	2.837	31	6.11	3.05	29.8238	956.72
1/16/2007	16:03:46	1151	15.02	30.184	22	2.863	33	6.13	2.93	28.945	965.49
1/16/2007	16:04:21	1186	15	30.183	20.1	2.837	35	6.15	2.91	28.6901	966.7
1/16/2007	16:04:56	1221	14.98	30.184	22.9	2.837	37	6.15	2.89	28.5336	966.3
1/16/2007	16:05:31	1256	15.01	30.185	17.8	2.863	39	6.14	2.85	28.1449	966.09
1/16/2007	16:06:06	1291	14.82	30.185	17.1	2.863	40	6.15	2.8	27.5078	963.09
1/16/2007	16:06:42	1327	14.55	30.185	17	2.837	41	6.16	2.79	27.2574	959.1
1/16/2007	16:07:16	1361	14.36	30.185	16.9	2.811	43	6.17	2.77	26.9172	954.17
1/16/2007	16:07:51	1396	14.18	30.185	17.1	2.811	45	6.17	2.76	26.7119	948.12

INSTRUCTIONS: This is the raw data export format from the Win-Situ® Low Flow Cell data file: Hartford Quarterly Groundwater Sampling-07003-003095.17-001-Hartford Working Group-HMW-50C-1-16-2007.flo To Generate a report insert a new sheet based on a sheet template. See 'Sheet Template' and 'Insert a new sheet that's based on a custom template' in Excel help. An example template, InSituLowFlow.xls, is provided by the Win-Situ® Installation. You may copy this template from the templates subfolder

Operator Name: N_DENNIS
 Company Name: BV-Clayton
 Project Name: Hartford Quarterly Groundwater Sampling-07003-003095.17-001
 Site Name: Hartford Working Group
 Well ID: HMW-50C/070116

pH Sensor:	Installed	Target Value	0.1 [pH]	Target Percent	0 [%]
ORP Sensor:	Installed	Target Value	10 [mV]	Target Percent	0 [%]
DO Sensor:	Installed	Target Value	0.3 [mg/L]	Target Percent	0 [%]
Cond Sensor:	Installed	Target Value	0.1 [μ S/cm]	Target Percent	3 [%]
Turb Sensor:	Installed	Target Value	1 [NTU]	Target Percent	10 [%]

Pump Model/Type: 11035
 Tubing Type: polyethylene
 Tubing Diam: 0.17 [in]
 Tubing Length: 64 [ft]
 Well Depth: 59.5 [ft]
 Well Diam: 2 [in]
 Screen Len: 115.2 [in]
 Screen Depth: 47.88 [ft]
 Pump Inlet Depth: 0 [in]
 Depth to Water: 38.6 [ft]
 Pump Level (TOC): 47.88 [ft]

Final Pumping Rate: 480 [mL/min]
 Stable Draw Down: 0.3 [ft]
 Total Volume Formula: Volume = cup (200 mL) + tubing (285.7 mL) - pH_ORP (16 mL) - DO (14 mL) - Cond (13 mL) - Turb (40 mL)
 Calculated Total Volume: 402.66 [mL]
 Actual Total Volume: 402.66 [mL]
 Calculated Measurement Interval: 51 [sec]
 Actual Measurement Interval: 51 [sec]

Start date/time: 1/16/2007 14:08:41
 End date/time: 1/16/2007 14:59:18
 Total Time: 0:50:37

Reading #	pH [pH]	Variance	ORP [mV]	Variance	DO [mg/L]	Variance	RDO []	Variance	Cond [μ S/cm]	Variance	Turb [NTU]	Variance	Temp [C]	Variance	Time
4	6.76	0	-275.53	0	0.37	-0.01			1744.42	2.62	4.01	0.36	12.15	-0.09	14:55:06
3	6.76	0	-283.33	-7.79	0.36	-0.01			1734.64	-9.78	3.91	-0.1	12.12	-0.03	14:56:00
2	6.76	0	-277.25	6.08	0.34	-0.02			1726.25	-8.39	4.15	0.24	12.3	0.18	14:56:52
1	6.75	-0.01	-276.05	1.2	0.34	-0.01			1725.6	-0.64	5.64	1.49	12.3	0	14:57:45
0	6.74	-0.01	-276.66	-0.6	0.33	-0.01			1728.18	2.57	4.08	-1.56	12.24	-0.06	14:58:37

pH Min: 6.74
 pH Max: 6.76
 ORP Min: -283.33
 ORP Max: -275.53
 DO Min: 0.33
 DO Max: 0.37
 RDO Min:
 RDO Max:
 Cond Min: 1725.6
 Cond Max: 1744.42
 Turb Min: 3.91
 Turb Max: 5.64
 Temp Min: 12.12
 Temp Max: 12.3

Notes:

TURBIDITY </=10NTU

Device Record:

In-Situ Inc.

Troll 9000 Pro XP

Report generated:

1/20/2007 11:06:49

Report from file:

...Hartford Quarterly Groundwater Sampling-07003-003095.17-001-Hartford Working Group-HMW-50C-1-16-2007.flo.bin

Win-Situ® Version

4.57.0.0

Serial number:

45174

Firmware Version

2

Unit name:

MP Troll 9000

Test name:

LowFlow

Test defined on:

1/16/2007 14:08:41

Test started on:

1/16/2007 14:08:41

Test stopped on:

N/A N/A

Data gathered using Event testing

Time between data points: 0.0 Seconds.

Time between default storages: 0.0 Seconds.

Monitoring data on channel [1]

Data stored if delta value exceeds: 0 Celsius

Number of data samples: 58

TOTAL DATA SAMPLES

58

Channel number [1]

Measurement type: Temperature

Channel name:

Channel number [3]

Measurement type: Barometric Pressure

Channel name:

Channel number [4]

Measurement type: Turbidity

Channel name:

Channel number [5]

Measurement type: Battery Voltage

Channel name:

Channel number [11]

Measurement type: ORP

Channel name:

Channel number [12]

Measurement type: pH

Channel name:

Channel number [25]

Measurement type: Dissolved Oxygen

Channel name:

Channel number [25]

Measurement type:

Channel name:

Dissolved Oxygen %Saturation

Channel number [45]

Measurement type:

Channel name:

Conductivity, Low Range

Date	Time	ET (sec)	Chan[1]	Chan[3]	Chan[4]	Chan[5]	Chan[11]	Chan[12]	Chan[25]	Chan[25]	Chan[45]
			Temperature Celsius	Barometric Inches Hg	Turbidity NTU	Battery Volts	ORP millivolts	pH	Clark DO milligrams/L	Clark DO Sat %Saturation	Conductivity microSiemens/cm
1/16/2007	14:08:41	0	4.76	30.12	13.7	2.889	-65	-18.36	2.43	18.8835	1324.13
1/16/2007	14:09:33	52	12.21	30.122	12.3	2.889	-86	-17.7	0.95	8.8267	1697.83
1/16/2007	14:10:25	104	11.87	30.123	12.1	2.863	-100	1.43	0.49	4.5075	1903.35
1/16/2007	14:11:18	157	12.09	30.124	11	2.837	-111	4.95	0.28	2.5803	2006.26
1/16/2007	14:12:11	210	11.9	30.124	12.1	2.837	-120	5.96	0.83	7.7277	2115.12
1/16/2007	14:13:03	262	11.77	30.124	10	2.889	-128	6.39	2.09	19.3789	2182.8
1/16/2007	14:13:57	316	11.7	30.127	11.1	2.837	-135	6.62	2.23	20.6378	2194.16
1/16/2007	14:14:49	368	11.82	30.128	10.2	2.889	-139	6.75	2.2	20.3563	2198.32
1/16/2007	14:15:42	421	12.33	30.131	8.4	2.837	-144	6.84	2.1	19.7227	2208.78
1/16/2007	14:16:34	473	12.36	30.133	8.7	2.837	-146	6.89	2.04	19.1594	2213
1/16/2007	14:17:27	526	12.81	30.135	7.6	2.889	-149	6.93	1.93	18.2966	2213
1/16/2007	14:18:19	578	12.59	30.137	7.9	2.889	-149	6.95	1.88	17.6884	2116.08
1/16/2007	14:19:11	630	12.54	30.139	6.8	2.837	-147	6.93	1.82	17.1294	2101.69
1/16/2007	14:20:04	683	12.37	30.141	6.6	2.863	-147	6.93	1.75	16.4367	2078.15
1/16/2007	14:20:57	736	11.84	30.141	6.7	2.863	-146	6.93	1.72	15.9203	2061.52
1/16/2007	14:21:49	788	12.18	30.142	6	2.863	-146	6.91	1.62	15.1533	2048.77
1/16/2007	14:22:42	841	12.55	30.143	6.4	2.837	-146	6.91	1.54	14.4893	2065.18
1/16/2007	14:23:34	893	12.28	30.145	5.6	2.863	-147	6.9	1.5	14.0224	2055.12
1/16/2007	14:24:28	947	12.32	30.144	5.2	2.889	-147	6.88	1.44	13.4634	2027.27
1/16/2007	14:25:20	999	12.09	30.146	6.4	2.863	-148	6.88	1.27	11.8675	2022.85
1/16/2007	14:26:13	1052	12.47	30.146	5.6	2.837	-150	6.86	1.17	10.9831	2008.83
1/16/2007	14:27:05	1104	12.54	30.147	6	2.889	-152	6.86	1.11	10.4706	2006.22
1/16/2007	14:27:58	1157	12.29	30.147	5.1	2.889	-154	6.84	1.03	9.6133	1992.43
1/16/2007	14:28:50	1209	12.4	30.148	5	2.889	-158	6.83	0.96	8.9858	1971.26
1/16/2007	14:29:42	1261	12.04	30.148	5.4	2.837	-164	6.83	0.93	8.6425	1934.27
1/16/2007	14:30:35	1314	12.67	30.149	4.6	2.889	-172	6.82	0.88	8.2736	1945.63
1/16/2007	14:31:27	1366	12.65	30.149	5	2.889	-183	6.82	0.85	7.9872	1941.56
1/16/2007	14:32:20	1419	12.38	30.149	4.4	2.837	-201	6.81	0.84	7.8611	1907.23
1/16/2007	14:33:12	1471	12.29	30.152	5.1	2.837	-216	6.82	0.81	7.5863	1915.89
1/16/2007	14:34:05	1524	11.79	30.145	4.9	2.837	-230	6.82	0.8	7.3573	1862.81
1/16/2007	14:34:58	1577	12.2	30.152	3.7	2.889	-245	6.8	0.76	7.0617	1867.3
1/16/2007	14:35:51	1630	12.24	30.154	4.2	2.811	-254	6.81	0.74	6.9047	1868.06
1/16/2007	14:36:43	1682	12.29	30.153	4.1	2.889	-261	6.8	0.71	6.6442	1856.1
1/16/2007	14:37:36	1735	12.53	30.154	4.7	2.889	-265	6.78	0.68	6.3947	1850.91
1/16/2007	14:38:28	1787	12.28	30.154	4.4	2.837	-269	6.81	0.67	6.2494	1849.44
1/16/2007	14:39:20	1839	12.14	30.155	4.2	2.811	-271	6.78	0.66	6.1778	1826.14
1/16/2007	14:40:13	1892	12.09	30.155	4.1	2.863	-273	6.78	0.64	5.9373	1807.64
1/16/2007	14:41:06	1945	12.1	30.156	4.1	2.889	-273	6.78	0.62	5.7363	1806.23
1/16/2007	14:41:58	1997	12.26	30.156	3.4	2.889	-274	6.78	0.6	5.5549	1790.89
1/16/2007	14:42:51	2050	12.07	30.157	4.3	2.837	-276	6.8	0.58	5.3899	1804.12
1/16/2007	14:43:43	2102	12.45	30.158	4	2.889	-277	6.77	0.56	5.2727	1795.05
1/16/2007	14:44:37	2156	12.53	30.159	3.7	2.889	-276	6.78	0.54	5.1112	1804.83
1/16/2007	14:45:29	2208	11.12	30.158	3.9	2.837	-275	6.79	0.57	5.1407	1730.11
1/16/2007	14:46:22	2261	12.49	30.159	3.7	2.837	-276	6.77	0.51	4.7723	1775.81
1/16/2007	14:47:14	2313	12.45	30.159	4.2	2.889	-275	6.77	0.5	4.6811	1781.26
1/16/2007	14:48:07	2366	12.61	30.158	4	2.863	-276	6.79	0.49	4.6082	1773.77
1/16/2007	14:48:59	2418	12.48	30.158	3.9	2.863	-276	6.77	0.48	4.4794	1771.06
1/16/2007	14:49:51	2470	12.7	30.159	3.9	2.889	-275	6.77	0.46	4.3503	1765.67
1/16/2007	14:50:44	2523	11.97	30.158	4.3	2.837	-275	6.76	0.47	4.3543	1745.73
1/16/2007	14:51:36	2575	11.97	30.159	3.9	2.837	-275	6.77	0.45	4.2038	1743.76
1/16/2007	14:52:29	2628	12.07	30.16	4.3	2.863	-275	6.76	0.41	3.8398	1736.58

1/16/2007	14:53:21	2880	1233	30.159	4.4	2.863	-276	6.77	0.39	3.608	1756.31
1/16/2007	14:54:14	2733	12.24	30.161	3.6	2.837	-276	6.76	0.38	3.5674	1741.8
1/16/2007	14:55:06	2785	12.15	30.161	4	2.837	-276	6.76	0.37	3.4767	1744.42
1/16/2007	14:55:06	2839	12.12	30.161	3.9	2.837	-283	6.76	0.36	3.3376	1734.64
1/16/2007	14:56:00	2891	12.12	30.161	4.1	2.889	-277	6.76	0.34	3.2922	1726.25
1/16/2007	14:56:52	2891	12.12	30.161	3.9	2.837	-283	6.76	0.36	3.3376	1734.64
1/16/2007	14:57:45	2944	12.3	30.161	4.1	2.889	-277	6.76	0.34	3.2922	1726.25
1/16/2007	14:58:37	2996	12.24	30.162	5.6	2.837	-276	6.75	0.34	3.158	1725.6
1/16/2007	14:58:37	2996	12.24	30.162	4.1	2.837	-277	6.74	0.33	3.0636	1728.18

INSTRUCTIONS: This is the raw data export format from the Win-Situ® Low Flow Cell data file, HARTFORD QUARTERLY GROUNDWATER SAMLING-07003-003095.17-001-HARTFORD WORKING GROUP-HMW-52C-070117-1-17-2007.flo To Generate a report insert a new sheet based on a sheet template. See 'Sheet Template' and 'Insert a new sheet that based on a custom template' in Excel help. An example template, InSituLowFlow.xls, is provided by the Win-Situ® Installation. You may copy this template from the templates sub

Operator Name: T_GRISEL
 Company Name: BV-CLAYTON
 Project Name: HARTFORD QUARTERLY GROUNDWATER SAMLING-07003-003095.17-001
 Site Name: HARTFORD WORKING GROUP
 Well ID: HMW-52C-070117

pH Sensor:	Installed	Target Value	0.1 [pH]	Target Percent	0 [%]
ORP Sensor:	Installed	Target Value	10 [mV]	Target Percent	0 [%]
DO Sensor:	Installed	Target Value	0.3 [mg/L]	Target Percent	0 [%]
Cond Sensor:	Installed	Target Value	0.1 [μ S/cm]	Target Percent	3 [%]
Turb Sensor:	Installed	Target Value	1 [NTU]	Target Percent	10 [%]

Pump Model/Type: 10965
 Tubing Type: POLYETHYLENE
 Tubing Diam: 0.17 [in]
 Tubing Length: 41 [ft]
 Well Depth: 40 [ft]
 Well Diam: 2 [in]
 Screen Len: 175.2 [in]
 Screen Depth: 24.62 [ft]
 Pump Inlet Depth: 0 [in]
 Depth to Water: 31.21 [ft]
 Pump Level (TOC): 33.21 [ft]

Final Pumping Rate: 400 [mL/min]
 Stable Draw Down: 0.3 [ft]
 Total Volume Formula: Volume = cup (200 mL) + tubing (183.0 mL) - pH_ORP (16 mL) - DO (14 mL) - Cond (13 mL) - Turb (40 mL)
 Calculated Total Volume: 300 [mL]
 Actual Total Volume: 300 [mL]
 Calculated Measurement Interval: 45 [sec]
 Actual Measurement Interval: 45 [sec]

Start date/time: 1/17/2007 9:39:45
 End date/time: 1/17/2007 9:44:57
 Total Time: 0:05:12

Reading #	pH [pH]	Variance	ORP [mV]	Variance	DO [mg/L]	Variance	RDO []	Variance	Cond [μ S/cm]	Variance	Turb [NTU]	Variance	Temp [C]	Variance	Time
4	6.68	0	-59.62	-8.16	1.59	-1.37			1055.65	6.75	574.51	37.53	13.38	0.22	9:41:17
3	6.69	0	-64.41	-4.78	1.12	-0.47			1054.43	-1.22	592.73	18.22	13.44	0.06	9:42:04
2	6.69	0	-67.69	-3.29	0.89	-0.23			1057.59	3.15	612.86	20.12	13.6	0.16	9:42:50
1	6.69	0	-69.95	-2.26	0.77	-0.12			1060.51	2.93	677.42	64.56	13.53	-0.07	9:43:37
0	6.69	0	-71.74	-1.79	0.68	-0.09			1061.24	0.73	663.73	-13.69	13.7	0.16	9:44:23

pH Min: 6.68
 pH Max: 6.69
 ORP Min: -71.74
 ORP Max: -59.62
 DO Min: 0.68
 DO Max: 1.59
 RDO Min:
 RDO Max:
 Cond Min: 1054.43
 Cond Max: 1061.24
 Turb Min: 574.51
 Turb Max: 677.42
 Temp Min: 13.38
 Temp Max: 13.7

Notes:

Device Record:

In-Situ Inc. Troll 9000 Profiler XP

Report generated: 1/20/2007 10:31:16
Report from file: ...\\HARTFORD QUARTERLY GROUNDWATER SAMLING-07003-003095.17-001-HARTFORD WORKING GROUP-HMW-52C-070117-1-17-2007.flo.bin
Win-Situ® Version 4.57.0.0

Serial number: 45176
Firmware Version 2
Unit name: MP Troll 9000

Test name: LowFlow

Test defined on: 1/17/2007 9:39:45
Test started on: 1/17/2007 9:39:45
Test stopped on: N/A N/A

Data gathered using Event testing
Time between data points: 0.0 Seconds.
Time between default storages: 0.0 Seconds.
Monitoring data on channel [1]
Data stored if delta value exceeds: 0 Celsius
Number of data samples: 7

TOTAL DATA SAMPLES 7

Channel number [1]
Measurement type: Temperature
Channel name:

Channel number [3]
Measurement type: Barometric Pressure
Channel name:

Channel number [4]
Measurement type: Turbidity
Channel name:

Channel number [5]
Measurement type: Battery Voltage
Channel name:

Channel number [11]
Measurement type: ORP
Channel name:

Channel number [12]
Measurement type: pH
Channel name:

Channel number [25]
Measurement type: Dissolved Oxygen
Channel name:

Channel number [25]

Measurement type:

Channel name:

Dissolved Oxygen %Saturation

Channel number [45]

Measurement type:

Channel name:

Conductivity, Low Range

Date	Time	ET (sec)	Chan[1]	Chan[3]	Chan[4]	Chan[5]	Chan[11]	Chan[12]	Chan[25]	Chan[25]	Chan[45]
			Temperature Celsius	Barometric Inches Hg	Turbidity NTU	Battery Volts	ORP millivolts	pH pH	Clark DO milligrams/L	Clark DO Sat %Saturation	Conductivity microSiemens/cm
1/17/2007	9:39:45	0	12.72	30.191	441.7	2.707	-33	6.68	7.44	69.816	1026.63
1/17/2007	9:40:31	46	13.16	30.191	537	2.733	-51	6.68	2.96	28.0444	1048.91
1/17/2007	9:41:17	92	13.38	30.19	574.5	2.733	-60	6.68	1.59	15.1534	1055.65
1/17/2007	9:42:04	139	13.44	30.19	592.7	2.759	-64	6.69	1.12	10.6479	1054.43
1/17/2007	9:42:50	185	13.6	30.191	612.9	2.733	-68	6.69	0.89	8.5311	1057.59
1/17/2007	9:43:37	232	13.53	30.191	677.4	2.733	-70	6.69	0.77	7.3586	1060.51
1/17/2007	9:44:23	278	13.7	30.192	663.7	2.733	-72	6.69	0.68	6.4746	1061.24

INSTRUCTIONS: This is the raw data export format from the Win-Situ® Low Flow Cell data file:HARTFORD QUARTERLY GROUNDWATER SAMLING-07003-003095.17-001-HARTFORD WORKING GROUP-MP-81C-070116-1-16-2007.flo To Generate a report insert a new sheet based on a sheet template. See 'Sheet Template' and 'Insert a new sheet that's based on a custom template' in Excel help. An example template, InSituLowFlow.xls, is provided by the Win-Situ® Installation. You may copy this template from the templates subf

Operator Name: T_GRISEL
Company Name: BV-CLAYTON
Project Name: HARTFORD QUARTERLY GROUNDWATER SAMLING-07003-003095.17-001
Site Name: HARTFORD WORKING GROUP
Well ID: MP-81C-070116

pH Sensor:	Installed	Target Value	0.1 [pH]	Target Percent	0 [%]
ORP Sensor:	Installed	Target Value	10 [mV]	Target Percent	0 [%]
DO Sensor:	Installed	Target Value	0.3 [mg/L]	Target Percent	0 [%]
Cond Sensor:	Installed	Target Value	0.1 [μ S/cm]	Target Percent	3 [%]
Turb Sensor:	Installed	Target Value	1 [NTU]	Target Percent	10 [%]

Pump Model/Type: 10965
Tubing Type: POLYETHYLENE
Tubing Diam: 0.17 [in]
Tubing Length: 36 [ft]
Well Depth: 32.8 [ft]
Well Diam: 2 [in]
Screen Len: 177.6 [in]
Screen Depth: 17.15 [ft]
Pump Inlet Depth: 0 [in]
Depth to Water: 28.43 [ft]
Pump Level (TOC): 30.5 [ft]

Final Pumping Rate: 310 [mL/min]
Stable Draw Down: 0 [ft]
Total Volume Formula: Volume = cup (200 mL) + tubing (160.7 mL) - pH_ORP (16 mL) - DO (14 mL) - Cond (13 mL) - Turb (40 mL)
Calculated Total Volume: 277.68 [mL]
Actual Total Volume: 277.68 [mL]
Calculated Measurement Interval: 54 [sec]
Actual Measurement Interval: 54 [sec]

Start date/time: 1/16/2007 14:10:43
End date/time: 1/16/2007 14:31:29
Total Time: 0:20:46

Reading #	pH [pH]	Variance	ORP [mV]	Variance	DO [mg/L]	Variance	RDO []	Variance	Cond [μ S/cm]	Variance	Turb [NTU]	Variance	Temp [C]	Variance	Time
4	6.61	0	84.25	0.99	0.85	-0.01			1042.4	-0.48	11.58	-6.11	14.11	0.01	14:27:24
3	6.61	0	84.77	0.52	0.85	0			1045.01	2.6	12.24	0.67	14.13	0.01	14:28:21
2	6.6	0	85.42	0.65	0.85	0.01			1044.05	-0.95	10.05	-2.19	14.05	-0.08	14:29:17
1	6.61	0	85.98	0.56	0.84	-0.01			1045.95	1.9	9.37	-0.68	14.14	0.09	14:30:13
0	6.61	0	86.32	0.35	0.84	0			1046.19	0.23	9	-0.37	14.16	0.02	14:31:08

pH Min: 6.6
pH Max: 6.61
ORP Min: 84.25
ORP Max: 86.32
DO Min: 0.84
DO Max: 0.85
RDO Min:
RDO Max:
Cond Min: 1042.4
Cond Max: 1046.19
Turb Min: 9
Turb Max: 12.24
Temp Min: 14.05
Temp Max: 14.16

Notes:

TURBIDITY<=10NTU

Device Record:

In-Situ Inc. Troll 9000 Profiler XP

Report generated: 1/20/2007 10:42:33
Report from file: ...\\HARTFORD QUARTERLY GROUNDWATER SAMLING-07003-003095.17-001-HARTFORD WORKING GROUP-MP-81C-070116-1-16-2007.flb.bin
Win-Situ® Version 4.57.0.0

Serial number: 45176
Firmware Version 2
Unit name: MP Troll 9000

Test name: LowFlow

Test defined on: 1/16/2007 14:10:43
Test started on: 1/16/2007 14:10:43
Test stopped on: N/A N/A

Data gathered using Event testing

Time between data points: 0.0 Seconds.
Time between default storage: 0.0 Seconds.
Monitoring data on channel [1]
Data stored if delta value exceeds: 0 Celsius
Number of data samples: 23

TOTAL DATA SAMPLES 23

Channel number [1]
Measurement type: Temperature
Channel name:

Channel number [3]
Measurement type: Barometric Pressure
Channel name:

Channel number [4]
Measurement type: Turbidity
Channel name:

Channel number [5]
Measurement type: Battery Voltage
Channel name:

Channel number [11]
Measurement type: ORP
Channel name:

Channel number [12]
Measurement type: pH
Channel name:

Channel number [25]
Measurement type: Dissolved Oxygen
Channel name:

Channel number [25]

Measurement type:

Channel name:

Dissolved Oxygen %Saturation

Channel number [45]

Measurement type:

Channel name:

Conductivity, Low Range

Date	Time	ET (sec)	Chan[1]	Chan[3]	Chan[4]	Chan[5]	Chan[11]	Chan[12]	Chan[25]	Chan[25]	Chan[45]
			Temperature Celsius	Barometric Inches Hg	Turbidity NTU	Battery Volts	ORP millivolts	pH pH	Clark DO milligrams/L	Clark DO Sat %Saturation	Conductivity microSiemens/cm
1/16/2007	14:10:43	0	13.89	30.121	402.8	2.785	94	6.83	8.56	82.6108	1054.6
1/16/2007	14:11:39	56	13.71	30.124	138.4	2.811	83	6.67	2.97	28.5099	1042.17
1/16/2007	14:12:34	111	13.71	30.123	99.8	2.785	80	6.66	1.84	17.7335	1038.88
1/16/2007	14:13:30	167	13.8	30.125	95.8	2.811	78	6.64	1.4	13.473	1039.35
1/16/2007	14:14:25	222	13.95	30.127	92.9	2.811	78	6.64	1.19	11.462	1042.42
1/16/2007	14:15:22	279	13.94	30.128	64.5	2.811	78	6.63	1.06	10.2758	1043.6
1/16/2007	14:16:16	333	13.99	30.13	68.1	2.811	78	6.63	0.93	9.0317	1043.6
1/16/2007	14:17:13	390	14.2	30.133	52.4	2.785	78	6.62	0.94	9.1777	1046.22
1/16/2007	14:18:08	445	14.16	30.135	46.7	2.811	78	6.62	0.9	8.7661	1046.22
1/16/2007	14:19:04	501	14.25	30.136	36.3	2.811	78	6.62	0.86	8.3615	1050.04
1/16/2007	14:19:59	556	14.2	30.139	41.8	2.811	79	6.62	0.86	8.3131	1049.08
1/16/2007	14:20:56	613	14.13	30.139	27.6	2.811	79	6.61	0.89	8.592	1045.74
1/16/2007	14:21:50	667	14.13	30.14	23.5	2.811	79	6.61	0.86	8.2979	1048.12
1/16/2007	14:22:47	724	13.97	30.141	27.6	2.811	80	6.61	0.85	8.1664	1040.29
1/16/2007	14:23:43	780	13.97	30.142	18.3	2.811	81	6.61	0.88	8.5485	1043.36
1/16/2007	14:24:38	835	14.05	30.144	16.2	2.785	81	6.61	0.83	8.0677	1043.12
1/16/2007	14:25:33	890	13.97	30.145	14.6	2.785	82	6.61	0.87	8.3887	1041.23
1/16/2007	14:26:30	947	14.1	30.147	17.7	2.785	83	6.61	0.85	8.2537	1042.88
1/16/2007	14:27:24	1001	14.11	30.147	11.6	2.785	84	6.61	0.85	8.1934	1042.4
1/16/2007	14:28:21	1058	14.13	30.148	12.2	2.811	85	6.61	0.85	8.2132	1045.01
1/16/2007	14:29:17	1114	14.05	30.149	10.1	2.785	85	6.6	0.85	8.2579	1044.05
1/16/2007	14:30:13	1170	14.14	30.152	9.4	2.811	86	6.61	0.84	8.1388	1045.95
1/16/2007	14:31:08	1225	14.16	30.154	9	2.811	86	6.61	0.84	8.1607	1046.19

INSTRUCTIONS: This is the raw data export format from the Win-Situ® Low Flow Cell data file HARTFORD QUARTERLY GROUNDWATER SAMLING-07003-003095.17-00
 HARTFORD WORKING GROUP-MP-89C-070116-1-16-2007.flo To Generate a report insert a new sheet based on a sheet template. See 'Sheet Template' and 'Insert a new sheet that's based on a custom template' in Excel help. An example template, InSituLowFlow.xls, is provided by the Win-Situ® Installation. You may copy this template from the templates subf

Operator Name: T_GRISEL
 Company Name: BV-CLAYTON
 Project Name: HARTFORD QUARTERLY GROUNDWATER SAMLING-07003-003095.17-001
 Site Name: HARTFORD WORKING GROUP
 Well ID: MP-89C-070116

pH Sensor:	Installed	Target Value	0.1 [pH]	Target Percent	0 [%]
ORP Sensor:	Installed	Target Value	10 [mV]	Target Percent	0 [%]
DO Sensor:	Installed	Target Value	0.3 [mg/L]	Target Percent	0 [%]
Cond Sensor:	Installed	Target Value	0.1 [μ S/cm]	Target Percent	3 [%]
Turb Sensor:	Installed	Target Value	1 [NTU]	Target Percent	10 [%]

Pump Model/Type: 10965
 Tubing Type: POLYETHYLENE
 Tubing Diam: 0.17 [in]
 Tubing Length: 39 [ft]
 Well Depth: 38 [ft]
 Well Diam: 2 [in]
 Screen Len: 180 [in]
 Screen Depth: 23 [ft]
 Pump Inlet Depth: 0 [in]
 Depth to Water: 32.25 [ft]
 Pump Level (TOC): 34.25 [ft]

Final Pumping Rate: 345 [mL/min]
 Stable Draw Down: 0.2 [ft]
 Total Volume Formula: Volume = cup (200 mL) + tubing (174.1 mL) - pH_ORP (16 mL) - DO (14 mL) - Cond (13 mL) - Turb (40 mL)
 Calculated Total Volume: 291.07 [mL]
 Actual Total Volume: 291.07 [mL]
 Calculated Measurement Interval: 51 [sec]
 Actual Measurement Interval: 51 [sec]

Start date/time: 1/16/2007 15:33:59
 End date/time: 1/16/2007 15:41:25
 Total Time: 0:07:26

Reading #	pH [pH]	Variance	ORP [mV]	Variance	DO [mg/L]	Variance	RDO []	Variance	Cond [μ S/cm]	Variance	Turb [NTU]	Variance	Temp [C]	Variance	Time
4	6.69	0	-67.76	-2.85	1.03	-0.1			1290.52	2.54	1037.06	42.53	14.74	-0.02	15:37:28
3	6.69	0	-70.18	-2.42	0.99	-0.04			1287.99	-2.52	934.26	-102.81	14.72	-0.02	15:38:21
2	6.69	0	-72.35	-2.17	0.93	-0.06			1290.89	2.9	861.61	-72.64	14.78	0.06	15:39:13
1	6.69	0.01	-74.26	-1.91	0.87	-0.07			1287.29	-3.61	827.44	-34.17	14.78	-0.01	15:40:06
0	6.69	0	-76	-1.74	0.9	0.03			1293.45	6.16	855.75	28.3	14.81	0.03	15:40:59

pH Min: 6.69
 pH Max: 6.69
 ORP Min: -76
 ORP Max: -67.76
 DO Min: 0.87
 DO Max: 1.03
 RDO Min:
 RDO Max:
 Cond Min: 1287.29
 Cond Max: 1293.45
 Turb Min: 827.44
 Turb Max: 1037.06
 Temp Min: 14.72
 Temp Max: 14.81

Notes:

Device Record:

In-Situ Inc.

Troll 9000 Profiler XP

Report generated:

1/20/2007 10:45:10

Report from file:

...HARTFORD QUARTERLY GROUNDWATER SAMLING-07003-003095.17-001-HARTFORD WORKING GROUP-MP-89C-070116-1-16-2007.flo.bin

Win-Situ® Version

4.57.0.0

Serial number:

45176

Firmware Version

2

Unit name:

MP Troll 9000

Test name:

LowFlow

Test defined on:

1/16/2007 15:33:59

Test started on:

1/16/2007 15:33:59

Test stopped on:

N/A N/A

Data gathered using Event testing

Time between data points: 0.0 Seconds.

Time between default storages: 0.0 Seconds.

Monitoring data on channel [1]

Data stored if delta value exceeds: 0 Celsius

Number of data samples: 9

TOTAL DATA SAMPLES

9

Channel number [1]

Measurement type: Temperature

Channel name:

Channel number [3]

Measurement type: Barometric Pressure

Channel name:

Channel number [4]

Measurement type: Turbidity

Channel name:

Channel number [5]

Measurement type: Battery Voltage

Channel name:

Channel number [11]

Measurement type: ORP

Channel name:

Channel number [12]

Measurement type: pH

Channel name:

Channel number [25]

Measurement type: Dissolved Oxygen

Channel name:

Channel number [25]

Measurement type:

Channel name:

Dissolved Oxygen %Saturation

Channel number [45]

Measurement type:

Channel name:

Conductivity, Low Range

Date	Time	ET (sec)	Chan[1]	Chan[3]	Chan[4]	Chan[5]	Chan[11]	Chan[12]	Chan[25]	Chan[45]
			Temperature Celsius	Barometric Inches Hg	Turbidity NTU	Battery Volts	ORP millivolts	pH	Clark DO milligrams/L	Clark DO Sat %Saturation
1/16/2007	15:33:59	0	14.71	30.142	981.3	2.785	-56	6.86	8.03	78.9555
1/16/2007	15:34:50	51	14.63	30.145	1025.1	2.811	-58	6.72	2.51	24.6602
1/16/2007	15:35:43	104	14.65	30.146	1069.6	2.811	-62	6.7	1.45	14.1922
1/16/2007	15:36:35	156	14.76	30.148	994.5	2.811	-65	6.69	1.14	11.1971
1/16/2007	15:37:28	209	14.74	30.151	1037.1	2.811	-68	6.69	1.03	10.1669
1/16/2007	15:38:21	262	14.72	30.152	934.3	2.811	-70	6.69	0.99	9.7554
1/16/2007	15:39:13	314	14.78	30.154	861.6	2.785	-72	6.69	0.93	9.202
1/16/2007	15:40:06	367	14.78	30.156	827.4	2.811	-74	6.69	0.87	8.5547
1/16/2007	15:40:59	420	14.81	30.158	855.7	2.811	-76	6.69	0.9	8.8677
										1293.45

INSTRUCTIONS: This is the raw data export format from the Win-Situ® Low Flow Cell data file:HARTFORD QUARTERLY GROUNDWATER SAMLING-07003-003095.17-001-HARTFORD WORKING GROUP-MP-92D-070116-1-16-2007.flo To Generate a report insert a new sheet based on a sheet template. See 'Sheet Template' and 'Insert a new sheet that's based on a custom template' in Excel help. An example template, InSituLowFlow.xls, is provided by the Win-Situ® Installation. You may copy this template from the templates subf

Operator Name: T_GRISEL
 Company Name: BV-CLAYTON
 Project Name: HARTFORD QUARTERLY GROUNDWATER SAMLING-07003-003095.17-001
 Site Name: HARTFORD WORKING GROUP
 Well ID: MP-92D-070116

pH Sensor:	Installed	Target Value	0.1 [pH]	Target Percent	0 [%]
ORP Sensor:	Installed	Target Value	10 [mV]	Target Percent	0 [%]
DO Sensor:	Installed	Target Value	0.3 [mg/L]	Target Percent	0 [%]
Cond Sensor:	Installed	Target Value	0.1 [μ S/cm]	Target Percent	3 [%]
Turb Sensor:	Installed	Target Value	1 [NTU]	Target Percent	10 [%]

Pump Model/Type: 10965
 Tubing Type: POLYETHYLENE
 Tubing Diam: 0.17 [in]
 Tubing Length: 39 [ft]
 Well Depth: 37.8 [ft]
 Well Diam: 2 [in]
 Screen Len: 174 [in]
 Screen Depth: 22.7 [ft]
 Pump Inlet Depth: 0 [in]
 Depth to Water: 31.04 [ft]
 Pump Level (TOC): 32 [ft]

Final Pumping Rate: 345 [mL/min]
 Stable Draw Down: 0.3 [ft]
 Total Volume Formula: Volume = cup (200 mL) + tubing (174.1 mL) - pH_ORP (16 mL) - DO (14 mL) - Cond (13 mL) - Turb (40 mL)
 Calculated Total Volume: 291.07 [mL]
 Actual Total Volume: 291.07 [mL]
 Calculated Measurement Interval: 51 [sec]
 Actual Measurement Interval: 51 [sec]

Start date/time: 1/16/2007 12:28:02
 End date/time: 1/16/2007 12:48:37
 Total Time: 0:20:35

Reading #	pH [pH]	Variance	ORP [mV]	Variance	DO [mg/L]	Variance	RDO []	Variance	Cond [μ S/cm]	Variance	Turb [NTU]	Variance	Temp [C]	Variance	Time
4	6.62	0	-35.52	-0.09	1.07	0.19			1173.89	-6.63	62.07	-7.27	14.78	-0.14	12:44:39
3	6.62	0	-35.87	-0.34	0.93	-0.14			1173.29	-0.6	69.12	7.05	14.59	-0.19	12:45:32
2	6.63	0.01	-36.98	-1.11	0.88	-0.05			1178.71	5.42	52.48	-16.65	14.73	0.14	12:46:24
1	6.62	-0.01	-36.89	0.09	0.88	-0.01			1177.8	-0.91	49.26	-3.21	14.63	-0.1	12:47:18
0	6.62	0	-37.15	-0.25	0.87	0			1176.29	-1.51	54.72	5.45	14.67	0.04	12:48:10

pH Min: 6.62
 pH Max: 6.63
 ORP Min: -37.15
 ORP Max: -35.52
 DO Min: 0.87
 DO Max: 1.07
 RDO Min:
 RDO Max:
 Cond Min: 1173.29
 Cond Max: 1178.71
 Turb Min: 49.26
 Turb Max: 69.12
 Temp Min: 14.59
 Temp Max: 14.78

Device Record:

In-Situ Inc. Troll 9000 Profiler XP

Report generated: 1/20/2007 10:47:39
Report from file: ...\\HARTFORD QUARTERLY GROUNDWATER SAMLING-07003-003095.17-001-HARTFORD WORKING GROUP-MP-92D-070116-1-16-2007.flo.bin
Win-Situ® Version 4.57.0.0

Serial number: 45176
Firmware Version 2
Unit name: MP Troll 9000

Test name: LowFlow

Test defined on: 1/16/2007 12:28:02
Test started on: 1/16/2007 12:28:02
Test stopped on: N/A N/A

Data gathered using Event testing
Time between data points: 0.0 Seconds.
Time between default storages: 0.0 Seconds.
Monitoring data on channel [1]
Data stored if delta value exceeds: 0 Celsius
Number of data samples: 24

TOTAL DATA SAMPLES 24

Channel number [1]
Measurement type: Temperature
Channel name:

Channel number [3]
Measurement type: Barometric Pressure
Channel name:

Channel number [4]
Measurement type: Turbidity
Channel name:

Channel number [5]
Measurement type: Battery Voltage
Channel name:

Channel number [11]
Measurement type: ORP
Channel name:

Channel number [12]
Measurement type: pH
Channel name:

Channel number [25]
Measurement type: Dissolved Oxygen
Channel name:

Channel number [25]

Measurement type:

Channel name:

Dissolved Oxygen %Saturation

Channel number [45]

Measurement type:

Channel name:

Conductivity, Low Range

Date	Time	ET (sec)	Chan[1]	Chan[3]	Chan[4]	Chan[5]	Chan[11]	Chan[12]	Chan[25]	Chan[25]	Chan[45]
			Temperature Celsius	Barometric Inches Hg	Turbidity NTU	Battery Volts	ORP millivolts	pH pH	Clark DO milligrams/L	Clark DO Sat %Saturation	Conductivity microSiemens/cm
1/16/2007	12:28:02	0	13.62	30.12	419.2	2.785	-22	6.72	6.2	59.5378	1118.77
1/16/2007	12:28:53	51	13.97	30.121	409.1	2.811	-20	6.64	2.35	22.6972	1161.45
1/16/2007	12:29:46	104	14.04	30.123	359.1	2.785	-22	6.64	1.45	14.0611	1156.77
1/16/2007	12:30:38	156	14.2	30.122	355.7	2.785	-23	6.63	1.11	10.8399	1161.74
1/16/2007	12:31:31	209	14.4	30.124	367.3	2.785	-26	6.63	0.91	8.8984	1167.64
1/16/2007	12:32:23	261	14.57	30.125	353	2.785	-28	6.63	0.78	7.6558	1171.21
1/16/2007	12:33:16	314	14.49	30.127	325.9	2.785	-29	6.63	0.75	7.3452	1169.12
1/16/2007	12:34:08	366	15.03	30.129	289.3	2.785	-30	6.62	0.73	7.2019	1185.4
1/16/2007	12:35:01	419	14.81	30.13	365.5	2.811	-31	6.62	0.72	7.0931	1179.92
1/16/2007	12:35:55	473	14.63	30.127	244.8	2.785	-31	6.63	0.72	7.019	1176.6
1/16/2007	12:36:47	525	14.53	30.126	241	2.785	-32	6.63	0.72	7.0821	1175.7
1/16/2007	12:37:40	578	14.64	30.127	201.6	2.785	-33	6.62	0.73	7.1716	1177.2
1/16/2007	12:38:32	630	14.51	30.128	168.3	2.811	-33	6.62	0.74	7.2747	1173
1/16/2007	12:39:24	682	14.58	30.127	166.8	2.785	-34	6.62	0.84	8.1914	1172.7
1/16/2007	12:40:17	735	14.9	30.131	130.9	2.811	-34	6.61	0.82	8.0946	1181.13
1/16/2007	12:41:09	787	15.1	30.132	119.6	2.785	-35	6.62	0.82	8.1468	1182.04
1/16/2007	12:42:02	840	14.86	30.13	104.5	2.811	-35	6.62	0.88	8.6752	1176.29
1/16/2007	12:42:54	892	14.91	30.132	95.8	2.785	-35	6.62	0.88	8.6629	1174.79
1/16/2007	12:43:47	945	14.92	30.132	69.3	2.811	-35	6.62	0.88	8.6617	1180.52
1/16/2007	12:44:39	997	14.78	30.133	62.1	2.785	-36	6.62	1.07	10.5296	1173.89
1/16/2007	12:45:32	1050	14.59	30.13	69.1	2.811	-36	6.62	0.93	9.1158	1173.29
1/16/2007	12:46:24	1102	14.73	30.131	52.5	2.785	-37	6.63	0.88	8.6863	1178.71
1/16/2007	12:47:18	1156	14.63	30.131	49.3	2.785	-37	6.62	0.88	8.5951	1177.8
1/16/2007	12:48:10	1208	14.67	30.13	54.7	2.811	-37	6.62	0.87	8.5811	1176.29



APPENDIX E

LAST FOUR QUARTERS OF GROUNDWATER ANALYTICAL RESULTS

- E-1 BETX AND MTBE**
- E-2 Metals (Total and Dissolved)**
- E-3 General Chemistry and Natural Attenuation Parameters**



**APPENDIX E-1
BETX AND MTBE**

Appendix E-1
Last Four Quarters of Groundwater Analytical Results

BTEX and MTBE

1st through 4th Quarter 2006

The Hartford Working Group / Hartford, Illinois
1190505040 -- Madison County -- ILR000128249

PERIOD: From 01/12/2006 thru 10/12/2006 - Inclusive

SAMPLE TYPE: Water

SITE	DATE	RESULT TYPE	SAMPLE ID	Benzene	Ethylbenzene	Toluene	Xylene (total)	Methyl tert-butyl ether
				(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)
COMPARISON VALUE								
HMW-25	01/13/2006	Prim	HMW-25/060113	<2.0	<5.0	<5.0	<5.0	<2.0
HMW-25	04/07/2006	Prim	HMW-25/060407	<2.0	<5.0	<5.0	<5.0	<2.0
HMW-25	07/10/2006	Prim	HMW-25/060710	<2.0	<5.0	<5.0	<5.0	<2.0
HMW-25	10/11/2006	Prim	HMW-25/061011	<2.0	<5.0	<5.0	<5.0	<2.0
HMW-26	01/12/2006	Prim	HMW-26/060112	<2.0	<5.0	<5.0	<5.0	0.6J
HMW-26	04/07/2006	Prim	HMW-26/060407	<2.0	<5.0	<5.0	<5.0	0.6J
HMW-26	07/10/2006	Prim	HMW-26/060710	<2.0	<5.0	<5.0	<5.0	<2.0
HMW-26	10/11/2006	Prim	HMW-26/061011	<2.0	<5.0	<5.0	<5.0	0.9J
HMW-26	10/11/2006	Dup 1	DUP-001/061011	<2.0	<5.0	<5.0	<5.0	0.9J
HMW-27	01/12/2006	Prim	HMW-27/060112	<2.0	<5.0	<5.0	<5.0	<2.0
HMW-27	04/06/2006	Prim	HMW-27/060406	<2.0	<5.0	<5.0	<5.0	<2.0
HMW-27	07/10/2006	Prim	HMW-27/060710	<2.0	<5.0	<5.0	<5.0	<2.0
HMW-27	10/12/2006	Prim	HMW-27/061012	<2.0	<5.0	<5.0	<5.0	<2.0
HMW-28	01/13/2006	Prim	HMW-28/060113	<2.0	<5.0	<5.0	<5.0	<2.0
HMW-28	04/06/2006	Prim	HMW-28/060406	<2.0	<5.0	<5.0	<5.0	<2.0
HMW-28	07/10/2006	Prim	HMW-28/060710	<2.0	<5.0	<5.0	<5.0	<2.0
HMW-28	07/10/2006	Dup 1	Dup-001/060710	<2.0	<5.0	<5.0	<5.0	<2.0
HMW-28	10/12/2006	Prim	HMW-28/061012	<2.0	<5.0	<5.0	<5.0	<2.0
HMW-29	01/13/2006	Prim	HMW-29/060113	<2.0	<5.0	<5.0	<5.0	<2.0

See Notes at End of Table

Appendix E-1
Last Four Quarters of Groundwater Analytical Results
BTEX and MTBE
1st through 4th Quarter 2006
The Hartford Working Group / Hartford, Illinois
1190505040 -- Madison County -- ILR000128249

PERIOD: From 01/12/2006 thru 10/12/2006 - Inclusive

SAMPLE TYPE: Water

SITE	DATE	RESULT		SAMPLE ID	Benzene (ug/l)	Ethylbenzene (ug/l)	Toluene (ug/l)	Xylene (total) (ug/l)	Methyl tert-butyl ether (ug/l)
		TYPE							
COMPARISON VALUE									
HMW-29	01/13/2006	Dup 1		DUP001/060113	<2.0	<5.0	<5.0	<10000	<2.0
HMW-29	04/06/2006	Prim		HMW-29/060406	<2.0	<5.0	<5.0	<5.0	<2.0
HMW-29	04/06/2006	Dup 1		DUP-001/060406	<2.0	<5.0	<5.0	<5.0	<2.0
HMW-29	07/10/2006	Prim		HMW-29/060710	<2.0	<5.0	<5.0	<5.0	<2.0
HMW-29	10/12/2006	Prim		HMW-29/061012	<2.0	<5.0	<5.0	<5.0	<2.0
HMW-38C	10/10/2006	Prim		HMW-38C/06101	4510	442	63.4	1240	<20.0
HMW-39B	01/12/2006	Prim		HMW-39B/06011	<2.0	<5.0	<5.0	<5.0	<2.0
HMW-39B	04/06/2006	Prim		HMW-39B/06040	<2.0	<5.0	<5.0	<5.0	<2.0
HMW-39B	07/10/2006	Prim		HMW-39B/06071	<2.0	<5.0	<5.0	<5.0	<2.0
HMW-39B	10/10/2006	Prim		HMW-39B/06101	<2.0	<5.0	<5.0	<5.0	<2.0
HMW-39C	01/13/2006	Prim		HMW-39C/06011	<2.0	<5.0	<5.0	<5.0	<2.0
HMW-39C	04/06/2006	Prim		HMW-39C/06040	<2.0	<5.0	<5.0	<5.0	<2.0
HMW-39C	07/11/2006	Prim		HMW-39C/06071	<2.0	<5.0	<5.0	<5.0	<2.0
HMW-39C	10/11/2006	Prim		HMW-39C/06101	<2.0	<5.0	<5.0	<5.0	<2.0
HMW-40C	01/13/2006	Prim		HMW-40C/06011	<2.0	<5.0	<5.0	<5.0	<2.0
HMW-40C	01/13/2006	Dup 1		DUP-002/060113	<2.0	<5.0	<5.0	<5.0	<2.0
HMW-40C	04/06/2006	Prim		HMW-40C/06040	<2.0	<5.0	<5.0	<5.0	<2.0
HMW-40C	07/11/2006	Prim		HMW-40C/06071	<2.0	<5.0	<5.0	<5.0	<2.0
HMW-40C	10/10/2006	Prim		HMW-40C/06101	<2.0	<5.0	<5.0	<5.0	<2.0

See Notes at End of Table

Appendix E-1
Last Four Quarters of Groundwater Analytical Results

BTEX and MTBE

1st through 4th Quarter 2006

The Hartford Working Group / Hartford, Illinois
1190505040 -- Madison County -- ILR000128249

PERIOD: From 01/12/2006 thru 10/12/2006 - Inclusive

SAMPLE TYPE: Water

SITE	DATE	RESULT		SAMPLE ID	Benzene (ug/l)	Ethylbenzene (ug/l)	Toluene (ug/l)	Xylene (total) (ug/l)	Methyl tert-butyl ether (ug/l)
		TYPE							
COMPARISON VALUE					550	700	1000	10000	470
HMW-40C	10/10/2006	Dup 1		DUP-002/061010	<2.0	<5.0	<5.0	<5.0	<2.0
HMW-43C	10/10/2006	Prim		HMW-43C/06101	67.3	2.3J	1.7J	3.4J	<2.0
HMW-43C	10/10/2006	Dup 1		DUP-001/061010	57.2	1.9J	1.5J	2.9J	<2.0
HMW-44D	10/11/2006	Prim		HMW-44D/06101	2220	4.2J	11.2J	17.2J	<2.0
HMW-47B	10/10/2006	Prim		HMW-47B/06101	<2.0	<5.0	<5.0	<5.0	<2.0
HMW-48C	06/23/2006	Prim		HMW-48C/06062	2440	147	26J	178	<40.0
HMW-48D	10/10/2006	Prim		HMW-48D/06101	7750	9.6	21.7	13.1	4.0
HMW-49B	01/12/2006	Prim		HMW-49B/06011	56.4	610	<50.0	29J	<20.0
HMW-49B	04/06/2006	Prim		HMW-49B/06040	88.7	832	<50.0	70.1	<20.0
HMW-49C	01/13/2006	Prim		HMW-49C/06011	245	3410	3270	10600	500
HMW-49C	04/06/2006	Prim		HMW-49C/06040	232	2980	2840	8920	359
HMW-49C	07/10/2006	Prim		HMW-49C/06071	592	2180	2500	5230	<100
HMW-49C	10/11/2006	Prim		HMW-49C/06101	267	3740	6350	9640	818
HMW-49D	01/13/2006	Prim		HMW-49D/06011	200	<20.0	7.4J	6.4J	47.9
HMW-49D	04/06/2006	Prim		HMW-49D/06040	198	2.3J	8.5	13.5	43.5
HMW-49D	04/06/2006	Dup 1		DUP-001/060406	199	2.3J	8.4	13.4	42.9
HMW-49D	07/10/2006	Prim		HMW-49D/06071	339	4.1J	12.0	15.2	49.2
HMW-49D	07/10/2006	Dup 1		DUP-001/060710	318	4.2J	12.2J	15.3J	47.0
HMW-49D	10/10/2006	Prim		HMW-49D/06101	108	2.6J	6.9	10.5	46.6

See Notes at End of Table

Appendix E-1

Last Four Quarters of Groundwater Analytical Results

BTEX and MTBE

1st through 4th Quarter 2006

The Hartford Working Group / Hartford, Illinois
1190505040 -- Madison County -- ILR000128249

PERIOD: From 01/12/2006 thru 10/12/2006 - Inclusive

SAMPLE TYPE: Water

SITE	DATE	RESULT		SAMPLE ID	Benzene (ug/l)	Ethylbenzene (ug/l)	Toluene (ug/l)	Xylene (total) (ug/l)	Methyl tert-butyl ether (ug/l)
		TYPE							
COMPARISON VALUE									
HMW-49D	10/10/2006	Dup 1		DUP-003/061010	109	2.4J	7.6	10.9	37.0
HMW-50A	01/12/2006	Prim		HMW-50A/060111	<2.0	<5.0	<5.0	<5.0	<2.0
HMW-50A	01/12/2006	Dup 1		DUP-001/060112	<2.0	<5.0	<5.0	<5.0	<2.0
HMW-50A	04/07/2006	Prim		HMW-50A/060401	<2.0	<5.0	<5.0	<5.0	<2.0
HMW-50A	07/11/2006	Prim		HMW-50A/06071	<2.0	<5.0	<5.0	<5.0	<2.0
HMW-50A	10/10/2006	Prim		HMW-50A/06101	<2.0	<5.0	<5.0	<5.0	<2.0
HMW-50B	01/13/2006	Prim		HMW-50B/06011	<2.0	<5.0	<5.0	<5.0	<2.0
HMW-50B	04/06/2006	Prim		HMW-50B/06040	<2.0	<5.0	<5.0	<5.0	<2.0
HMW-50B	07/11/2006	Prim		HMW-50B/06071	<2.0	<5.0	<5.0	<5.0	<2.0
HMW-50B	10/10/2006	Prim		HMW-50B/06101	<2.0	<5.0	<5.0	<5.0	<2.0
HMW-50C	01/16/2006	Prim		HMW-50C/06011	128	1.6J	10.4	27.6	5.9
HMW-50C	04/07/2006	Prim		HMW-50C/06040	42.2	<5.0	3.6J	10	14J
HMW-50C	07/10/2006	Prim		HMW-50C/06071	99.1	<5.0	6.2	11.8	<2.0
HMW-50C	10/09/2006	Prim		HMW-50C/06100	77.8	<5.0	4.7J	6.7	3.8
HMW-52C	01/12/2006	Prim		HMW-52C/06011	<2.0	<5.0	<5.0	<5.0	<2.0
HMW-52C	04/07/2006	Prim		HMW-52C/06040	<2.0	<5.0	<5.0	<5.0	<2.0
HMW-52C	07/10/2006	Prim		HMW-52C/06071	<2.0	<5.0	<5.0	<5.0	<2.0
HMW-52C	10/10/2006	Prim		HMW-52C/06101	<2.0	<5.0	<5.0	<5.0	<2.0
HMW-53C	10/11/2006	Prim		HMW-53C/06101	207	1.2J	14.6	3.3J	<2.0

See Notes at End of Table

Appendix E-1
Last Four Quarters of Groundwater Analytical Results

BETX and MTBE

1st through 4th Quarter 2006

The Hartford Working Group / Hartford, Illinois
1190505040 -- Madison County -- ILR000128249

PERIOD: From 01/12/2006 thru 10/12/2006 - Inclusive

SAMPLE TYPE: Water

SITE	DATE	RESULT TYPE	SAMPLE ID	Benzene	Ethylbenzene	Toluene	Xylene (total)	Methyl tert-butyl ether
				(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)
COMPARISON VALUE				5	700	1000	10000	70
HMW-54C	10/12/2006	Prim	HMW-54C/06101	<2.0	<5.0	<5.0	<5.0	<2.0
MP-59A	10/11/2006	Prim	MP-59A/061011	0.5	<5.0	<5.0	<5.0	<2.0
MP-78D	10/12/2006	Prim	MP-78D/061012	15800	2600	26700	10700	<1000
MP-81C	01/13/2006	Prim	MP-81C/060113	<2.0	<5.0	<5.0	<5.0	<2.0
MP-81C	04/06/2006	Prim	MP-81C/060406	<2.0	<5.0	<5.0	<5.0	<2.0
MP-81C	04/06/2006	Dup 1	DUP-002/060406	<2.0	<5.0	<5.0	<5.0	<2.0
MP-81C	10/11/2006	Prim	MP-81C/061011	<2.0	<5.0	<5.0	<5.0	<2.0
MP-83C	10/12/2006	Prim	MP-83C/061012	8020	1960	18000	8520	<400
MP-85B	10/10/2006	Prim	MP-85B/061010	<2.0	<5.0	<5.0	<5.0	<2.0
MP-85D	10/11/2006	Prim	MP-85D/061011	3970	5.5	9.9	21.6	146
MP-89C	01/16/2006	Prim	MP-89C/060116	<2.0	<5.0	<5.0	<5.0	<2.0
MP-89C	04/06/2006	Prim	MP-89C/060406	<2.0	<5.0	<5.0	<5.0	<2.0
MP-89C	07/11/2006	Prim	MP-89C/060711	<2.0	<5.0	<5.0	<5.0	<2.0
MP-89C	10/11/2006	Prim	MP-89C/061011	<2.0	<5.0	<5.0	<5.0	<2.0
MP-92D	04/07/2006	Prim	MP-92D/060407	<2.0	<5.0	<5.0	<5.0	<2.0
MP-92D	07/11/2006	Prim	MP-92D/060711	<2.0	<5.0	<5.0	<5.0	<2.0
MP-92D	07/11/2006	Dup 1	DUP-002/060711	<2.0	<5.0	<5.0	<5.0	<2.0
MP-92D	10/11/2006	Prim	MP-92D/061011	<2.0	<5.0	<5.0	<5.0	<2.0

See Notes at End of Table



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NOTES

TABLES E-1, E-2 and E-3

Data prior to 2006 is provided in the Quarterly Groundwater Monitoring Report April 2006 dated August 8, 2006.

Comparison values are Tier 1 Class 1 Groundwater Remediation Objectives from Illinois EPA's Tiered Approach to Corrective Action Objectives (35 IAC Part 742). Groundwater quality values listed in 35 IAC Part 742 used for comparison purposes only.

mg/L = Milligrams per liter.

µg/L = Micrograms per liter.

J = Estimated value. Compound detected below the practical quantitation limit (PQL).

R = RPD outside accepted recovery limits.

S = Spike Recovery outside of accepted recovery limits.

NA = Constituent not analyzed by laboratory.



APPENDIX E-2

METALS (TOTAL AND DISSOLVED)

Appendix E-2

Last Four Quarters of Groundwater Analytical Results

Metals (Total and Dissolved)

1st through 4th Quarter 2006

The Hartford Working Group / Hartford, Illinois

1190505040 -- Madison County -- ILR000128249

PERIOD: From 01/12/2006 thru 10/12/2006 - Inclusive

SAMPLE TYPE: Water

CONSTITUENT	SITE	HMW-25	HMW-25	HMW-25	HMW-25	HMW-26
	SAMPLE ID	HMW-25/060113	HMW-25/060407	HMW-25/060710	HMW-25/061011	HMW-26/060112
	DATE	COMPARISON	01/13/2006	04/07/2006	07/10/2006	10/11/2006
RESULT TYPE	VALUE	Primary	Primary	Primary	Primary	Primary
Antimony	(mg/l)	0.006	<0.0050	<0.0050	<0.0050	<0.0050
Antimony (Dissolved)	(mg/l)	0.006	0.0030J	<0.0050	<0.0050	<0.0050
Arsenic	(mg/l)	0.05	<0.0030	<0.0030	<0.0030	<0.0030
Arsenic (Dissolved)	(mg/l)	0.05	<0.0030	<0.0030	<0.0030	0.0059
Barium	(mg/l)	2	0.251	0.248	0.292	0.268
Barium (Dissolved)	(mg/l)	2	0.222	0.229	0.271	0.248
Beryllium	(mg/l)	0.004	0.0008J	<0.0010	<0.0010	<0.0010
Beryllium (Dissolved)	(mg/l)	0.004	<0.0010	<0.0010	<0.0010	<0.0010
Cadmium	(mg/l)	0.005	0.0014J	<0.0020	0.0019J	0.0003J
Cadmium (Dissolved)	(mg/l)	0.005	<0.0020	<0.0020	0.0013J	<0.0020
Chromium	(mg/l)	0.1	<0.0100	0.0041J	0.0048J	<0.0100
Chromium (Dissolved)	(mg/l)	0.1	<0.0100	<0.0100	<0.0100	0.0049J
Cobalt	(mg/l)	1	<0.0100	<0.0100	0.0058J	<0.0100
Cobalt (Dissolved)	(mg/l)	1	0.0042J	<0.0100	0.0044J	0.0023J
Iron	(mg/l)	5	0.106	0.528	0.0211	0.0398
Iron (Dissolved)	(mg/l)	5	0.0264	0.0291	<0.0200	<0.0200
Lead	(mg/l)	0.0075	<0.0020	<0.0020	0.0004J	<0.0020
Lead (Dissolved)	(mg/l)	0.0075	<0.0020	<0.0020	<0.0020	<0.0020
Mercury	(mg/l)	0.002	<0.00020	<0.00020	<0.00020	<0.00020
Mercury (Dissolved)	(mg/l)	0.002	<0.00020	<0.00020	<0.00020	<0.00020
Nickel	(mg/l)	0.1	0.0063J	0.0121	0.0172	0.0056J

See Notes at End of Table

Appendix E-2
 Last Four Quarters of Groundwater Analytical Results
 Metals (Total and Dissolved)
 1st through 4th Quarter 2006
 The Hartford Working Group / Hartford, Illinois
 1190505040 -- Madison County -- ILR000128249

PERIOD: From 01/12/2006 thru 10/12/2006 - Inclusive

SAMPLE TYPE: Water

CONSTITUENT	SITE	COMPARISON	HMW-25	HMW-25	HMW-25	HMW-25	HMW-26
	SAMPLE ID		HMW-25/060113	HMW-25/060407	HMW-25/060710	HMW-25/061011	HMW-26/060112
	DATE		01/13/2006	04/07/2006	07/10/2006	10/11/2006	01/12/2006
	RESULT TYPE	VALUE	Primary	Primary	Primary	Primary	Primary
Nickel (Dissolved)	(mg/l)	0.1	0.0094J	0.0117	0.0158	0.0079J	<0.0100
Selenium	(mg/l)	0.05	<0.0060	<0.0060	<0.0060	<0.0060	<0.0060
Selenium (Dissolved)	(mg/l)	0.05	<0.0060	<0.0060	<0.0060	<0.0060	<0.0060
Silver	(mg/l)	0.05	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100
Silver (Dissolved)	(mg/l)	0.05	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100
Vanadium	(mg/l)	0.049	<0.0100	<0.0100	<0.0100	0.0082J	0.0050J
Vanadium (Dissolved)	(mg/l)	0.049	<0.0100	<0.0100	<0.0100	<0.0100	0.0080J
Zinc	(mg/l)	5	0.0048J	0.0060J	0.0038J	<0.0100	0.129
Zinc (Dissolved)	(mg/l)	5	0.0078J	0.0055J	<0.0100	<0.0100	0.0039J

See Notes at End of Table

Appendix E-2

Last Four Quarters of Groundwater Analytical Results

Metals (Total and Dissolved)

1st through 4th Quarter 2006

The Hartford Working Group / Hartford, Illinois

1190505040 -- Madison County -- ILR000128249

PERIOD: From 01/12/2006 thru 10/12/2006 - Inclusive

SAMPLE TYPE: Water

CONSTITUENT	SITE	HMW-26	HMW-26	HMW-26	HMW-26	HMW-26	
	SAMPLE ID	HMW-26/060407	HMW-26/060710	HMW-26/060711	HMW-26/061011	DUP-001/061011	
	DATE	04/07/2006	07/10/2006	07/11/2006	10/11/2006	10/11/2006	
	RESULT TYPE	Primary	Primary	Primary	Primary	Duplicate 1	
Antimony	(mg/l)	0.006	<0.0050	NA	<0.0050	<0.0050	<0.0050
Antimony (Dissolved)	(mg/l)	0.006	<0.0050	<0.0050	NA	<0.0050	<0.0050
Arsenic	(mg/l)	0.05	0.0052	NA	0.0022J	0.0037	0.0048
Arsenic (Dissolved)	(mg/l)	0.05	0.0037	0.0036	NA	0.0039	0.0046
Barium	(mg/l)	2	0.186	NA	0.191	0.167	0.168
Barium (Dissolved)	(mg/l)	2	0.169	0.173	NA	0.155	0.152
Beryllium	(mg/l)	0.004	0.0003J	NA	<0.0010	<0.0010	<0.0010
Beryllium (Dissolved)	(mg/l)	0.004	0.0003J	<0.0010	NA	<0.0010	<0.0010
Cadmium	(mg/l)	0.005	0.0012J	NA	0.0017J	<0.0020	<0.0020
Cadmium (Dissolved)	(mg/l)	0.005	0.0012J	0.0010J	NA	<0.0020	<0.0020
Chromium	(mg/l)	0.1	0.0055J	NA	<0.0100	<0.0100	<0.0100
Chromium (Dissolved)	(mg/l)	0.1	0.0042J	0.0054J	NA	0.0061J	0.0059J
Cobalt	(mg/l)	1	<0.0100	NA	<0.0100	<0.0100	<0.0100
Cobalt (Dissolved)	(mg/l)	1	<0.0100	0.0066J	NA	<0.0100	<0.0100
Iron	(mg/l)	5	21.2S	NA	23.3S	22.1	21.3S
Iron (Dissolved)	(mg/l)	5	18.8S	20.8	NA	21.8	21.5
Lead	(mg/l)	0.0075	0.0016J	NA	0.0006J	0.0007J	<0.0020
Lead (Dissolved)	(mg/l)	0.0075	<0.0020	<0.0020	NA	<0.0020	<0.0020
Mercury	(mg/l)	0.002	<0.00020	NA	<0.00020	<0.00020	<0.00020
Mercury (Dissolved)	(mg/l)	0.002	<0.00020	<0.00020	NA	<0.00020	<0.00020
Nickel	(mg/l)	0.1	0.0049J	NA	0.0064J	<0.0100	<0.0100

See Notes at End of Table

Appendix E-2
 Last Four Quarters of Groundwater Analytical Results
 Metals (Total and Dissolved)
 1st through 4th Quarter 2006
 The Hartford Working Group / Hartford, Illinois
 1190505040 -- Madison County -- ILR000128249

PERIOD: From 01/12/2006 thru 10/12/2006 - Inclusive

SAMPLE TYPE: Water

CONSTITUENT	SITE	SAMPLE ID	HMW-26	HMW-26	HMW-26	HMW-26	HMW-26
	DATE		HMW-26/060407	HMW-26/060710	HMW-26/060711	HMW-26/061011	DUP-001/061011
	RESULT TYPE	VALUE	Primary	Primary	Primary	Primary	Duplicate 1
Nickel (Dissolved)	(mg/l)	0.1	0.0052J	0.0134	NA	<0.0100	<0.0100
Selenium?	(mg/l)	0.05	<0.0060	NA	<0.0060	<0.0060	<0.0060S
Selenium (Dissolved)	(mg/l)	0.05	<0.0060	<0.0060	NA	<0.0060	<0.0060S
Silver	(mg/l)	0.05	<0.0100	NA	<0.0100	<0.0100	<0.0100
Silver (Dissolved)	(mg/l)	0.05	<0.0100	<0.0100	NA	<0.0100	<0.0100
Vanadium	(mg/l)	0.049	0.0047J	NA	<0.0100	0.0092J	<0.0100
Vanadium (Dissolved)	(mg/l)	0.049	0.0033J	<0.0100	NA	0.0046J	0.0117
Zinc	(mg/l)	5	0.0065J	NA	0.0098J	<0.0100	<0.0100
Zinc (Dissolved)	(mg/l)	5	0.0021J	0.0025J	NA	<0.0100	<0.0100

See Notes at End of Table

Appendix E-2
 Last Four Quarters of Groundwater Analytical Results
 Metals (Total and Dissolved)
 1st through 4th Quarter 2006
 The Hartford Working Group / Hartford, Illinois
 1190505040 -- Madison County -- ILR000128249

PERIOD: From 01/12/2006 thru 10/12/2006 - Inclusive

SAMPLE TYPE: Water

CONSTITUENT	SITE	HMW-27	HMW-27	HMW-27	HMW-27	HMW-28
	SAMPLE ID	HMW-27/060112	HMW-27/060406	HMW-27/060710	HMW-27/061012	HMW-28/060113
	DATE	01/12/2006	04/06/2006	07/10/2006	10/12/2006	01/13/2006
RESULT TYPE	VALUE	Primary	Primary	Primary	Primary	Primary
Antimony	(mg/l)	0.006	<0.0050	<0.0050	<0.0050	<0.0050
Antimony (Dissolved)	(mg/l)	0.006	<0.0050	<0.0050	<0.0050	<0.0050
Arsenic	(mg/l)	0.05	<0.0030	<0.0030	<0.0030	<0.0030
Arsenic (Dissolved)	(mg/l)	0.05	<0.0030	<0.0015J	<0.0030	<0.0030
Barium	(mg/l)	2	0.121	0.161	0.108	0.101
Barium (Dissolved)	(mg/l)	2	0.0993	0.155	0.0945	0.102
Beryllium	(mg/l)	0.004	<0.0010	0.0003J	<0.0010	<0.0010
Beryllium (Dissolved)	(mg/l)	0.004	<0.0010	<0.0010	<0.0010	<0.0010
Cadmium	(mg/l)	0.005	<0.0020	<0.0020	0.0018J	0.0005J
Cadmium (Dissolved)	(mg/l)	0.005	0.0005J	<0.0020	0.0010J	0.0007J
Chromium	(mg/l)	0.1	<0.0100	0.0041J	0.0049J	<0.0100
Chromium (Dissolved)	(mg/l)	0.1	<0.0100	<0.0100	0.0052J	<0.0100
Cobalt	(mg/l)	1	0.0053J	0.0087J	0.0145	0.0090J
Cobalt (Dissolved)	(mg/l)	1	0.0057J	0.0062J	0.0116	0.0054J
Iron	(mg/l)	5	0.254	2.71	1.11	0.617
Iron (Dissolved)	(mg/l)	5	0.151	2.53	0.181	0.167
Lead	(mg/l)	0.0075	<0.0020	<0.0020	0.0017J	<0.0020
Lead (Dissolved)	(mg/l)	0.0075	<0.0020	<0.0020	<0.0020	<0.0020
Mercury	(mg/l)	0.002	<0.00020	<0.00020	<0.00020	<0.00020
Mercury (Dissolved)	(mg/l)	0.002	<0.00020	<0.00020	<0.00020	<0.00020
Nickel	(mg/l)	0.1	0.0136	0.0163	0.0247	0.0125

See Notes at End of Table

Appendix E-2

Last Four Quarters of Groundwater Analytical Results

Metals (Total and Dissolved)

1st through 4th Quarter 2006

The Hartford Working Group / Hartford, Illinois

1190505040 -- Madison County -- ILR000128249

PERIOD: From 01/12/2006 thru 10/12/2006 - Inclusive

SAMPLE TYPE: Water

CONSTITUENT	SITE	HMW-27	HMW-27	HMW-27	HMW-27	HMW-28	
	SAMPLE ID	HMW-27/060112	HMW-27/060406	HMW-27/060710	HMW-27/061012	HMW-28/060113	
	DATE	01/12/2006	04/06/2006	07/10/2006	10/12/2006	01/13/2006	
	RESULT TYPE	Primary	Primary	Primary	Primary	Primary	
Nickel (Dissolved)	(mg/l)	0.1	0.0118	0.0158	0.0209	0.0119	0.0129
Selenium	(mg/l)	0.05	<0.0060	<0.0060	0.0083	<0.0060S	<0.0060
Selenium (Dissolved)	(mg/l)	0.05	<0.0060	<0.0060	0.0080	<0.0060S	<0.0060
Silver	(mg/l)	0.05	<0.0100	<0.0100	<0.0051J	<0.0100	<0.0100
Silver (Dissolved)	(mg/l)	0.05	<0.0100	<0.0100	0.0049J	<0.0100	<0.0100
Vanadium	(mg/l)	0.049	0.0060J	<0.0100	<0.0100	<0.0100	0.0051J
Vanadium (Dissolved)	(mg/l)	0.049	0.0055J	<0.0100	<0.0100	0.0059J	<0.0100
Zinc	(mg/l)	5	<0.0100	0.0058J	0.0297	0.0132	0.0052J
Zinc (Dissolved)	(mg/l)	5	0.0025J	0.0054J	0.0050J	<0.0100	0.0028J

See Notes at End of Table

Appendix E-2

Last Four Quarters of Groundwater Analytical Results

Metals (Total and Dissolved)

1st through 4th Quarter 2006

The Hartford Working Group / Hartford, Illinois

1190505040 -- Madison County -- ILR000128249

PERIOD: From 01/12/2006 thru 10/12/2006 - Inclusive

SAMPLE TYPE: Water

CONSTITUENT	SITE	HMW-28	HMW-28	HMW-28	HMW-28	HMW-28
	SAMPLE ID	HMW-28/060406	HMW-28/060710	Dup-001/060710	HMW-28/061012	HMW-29/060113
	DATE	04/06/2006	07/10/2006	07/10/2006	10/12/2006	01/13/2006
	RESULT TYPE	Primary	Primary	Duplicate 1	Primary	Primary
Antimony	(mg/l)	0.006	<0.0050	<0.0050	<0.0050	<0.0050
Antimony (Dissolved)	(mg/l)	0.006	<0.0050	<0.0050	<0.0050	<0.0050
Arsenic	(mg/l)	0.05	<0.0030	<0.0030	<0.0030	<0.0030
Arsenic (Dissolved)	(mg/l)	0.05	<0.0030	<0.0030	<0.0030	<0.0011J
Barium	(mg/l)	2	0.0912	0.0924	0.0922	0.0891
Barium (Dissolved)	(mg/l)	2	0.0877	0.0837	0.0828	0.0915
Beryllium	(mg/l)	0.004	<0.0010	<0.0010	<0.0010	<0.0010
Beryllium (Dissolved)	(mg/l)	0.004	<0.0010	<0.0010	<0.0010	<0.0010
Cadmium	(mg/l)	0.005	<0.0020	0.0012J	0.0013J	0.0006J
Cadmium (Dissolved)	(mg/l)	0.005	0.0004J	0.0007J	0.0013J	<0.0020
Chromium	(mg/l)	0.1	<0.0100	0.0043J	0.0047J	<0.0100
Chromium (Dissolved)	(mg/l)	0.1	<0.0100	0.0040J	0.0041J	<0.0100
Cobalt	(mg/l)	1	0.0113	0.0151	0.0133	0.0056J
Cobalt (Dissolved)	(mg/l)	1	0.0087J	0.0149	0.0126	0.0098J
Iron	(mg/l)	5	0.0562	0.019J	0.016J	<0.0200
Iron (Dissolved)	(mg/l)	5	<0.0200	<0.0200	<0.0200	<0.0200
Lead	(mg/l)	0.0075	<0.0020	<0.0020	0.0005J	0.0005J
Lead (Dissolved)	(mg/l)	0.0075	<0.0020	<0.0020	<0.0020	<0.0020
Mercury	(mg/l)	0.002	<0.00020	<0.00020	<0.00020	<0.00020
Mercury (Dissolved)	(mg/l)	0.002	<0.00020	<0.00020	<0.00020	<0.00020
Nickel	(mg/l)	0.1	0.0222	0.0247	0.0243	0.0153

See Notes at End of Table

Appendix E-2

Last Four Quarters of Groundwater Analytical Results

Metals (Total and Dissolved)

1st through 4th Quarter 2006

The Hartford Working Group / Hartford, Illinois
 1190505040 -- Madison County -- ILR000128249

PERIOD: From 01/12/2006 thru 10/12/2006 - Inclusive

SAMPLE TYPE: Water

CONSTITUENT	SITE	HMW-28	HMW-28	HMW-28	HMW-28	HMW-28	HMW-29
	SAMPLE ID	HMW-28/060406	HMW-28/060710	Dup-001/060710	HMW-28/061012	HMW-29/060113	
	DATE	04/06/2006	07/10/2006	07/10/2006	10/12/2006	01/13/2006	
	RESULT TYPE	COMPARISON	Primary	Primary	Duplicate 1	Primary	Primary
Nickel (Dissolved)	(mg/l)	0.1	0.0211	0.0234	0.0222	0.0145	<0.0100
Selenium	(mg/l)	0.05	<0.0060	0.0270	0.0251	<0.0060	<0.0060
Selenium (Dissolved)	(mg/l)	0.05	<0.0060	0.0171	0.0210	<0.0060	<0.0060
Silver	(mg/l)	0.05	<0.0100	0.0035J	0.0048J	<0.0100	<0.0100
Silver (Dissolved)	(mg/l)	0.05	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100
Vanadium	(mg/l)	0.049	<0.0100	<0.0100	<0.0100	<0.0100	0.0048J
Vanadium (Dissolved)	(mg/l)	0.049	<0.0100	<0.0100	<0.0100	0.0088J	<0.0100
Zinc	(mg/l)	5	0.0063J	0.0063J	0.0062J	0.0086J	<0.0100
Zinc (Dissolved)	(mg/l)	5	0.0046J	0.0063J	0.0072J	<0.0100	0.0024J

See Notes at End of Table

Appendix E-2

Last Four Quarters of Groundwater Analytical Results

Metals (Total and Dissolved)

1st through 4th Quarter 2006

The Hartford Working Group / Hartford, Illinois

1190505040 -- Madison County -- ILR000128249

PERIOD: From 01/12/2006 thru 10/12/2006 - Inclusive

SAMPLE TYPE: Water

CONSTITUENT	SITE	HMW-29	HMW-29	HMW-29	HMW-29	HMW-29
	SAMPLE ID	DUP001/060113	HMW-29/060406	DUP-001/060406	HMW-29/060710	HMW-29/061012
	DATE	01/13/2006	04/06/2006	04/06/2006	07/10/2006	10/12/2006
	RESULT TYPE	Duplicate 1	Primary	Duplicate 1	Primary	Primary
Antimony	(mg/l)	0.006	<0.0050	<0.0050	<0.0050	<0.0050
Antimony (Dissolved)	(mg/l)	0.006	<0.0050	<0.0050	<0.0050S	0.0030J
Arsenic	(mg/l)	0.05	0.0013J	0.0020J	0.0019J	0.0026J
Arsenic (Dissolved)	(mg/l)	0.05	0.0014J	0.0019J	0.0028J	0.0015J
Barium	(mg/l)	2	0.137	0.133	0.128	0.147
Barium (Dissolved)	(mg/l)	2	0.120	0.120	0.119	0.122
Beryllium	(mg/l)	0.004	<0.0010	<0.0010	<0.0010	<0.0010
Beryllium (Dissolved)	(mg/l)	0.004	<0.0010	<0.0010	<0.0010	<0.0010
Cadmium	(mg/l)	0.005	0.0008J	0.0016J	0.0006J	0.0013J
Cadmium (Dissolved)	(mg/l)	0.005	0.0003J	<0.0020	0.0003J	0.0013J
Chromium	(mg/l)	0.1	<0.0100	0.0071J	0.0059J	0.0057J
Chromium (Dissolved)	(mg/l)	0.1	<0.0100	<0.0100	<0.0100	0.0054J
Cobalt	(mg/l)	1	<0.0100	<0.0100	<0.0100	0.0060J
Cobalt (Dissolved)	(mg/l)	1	<0.0100	0.0044J	<0.0100	0.0073J
Iron	(mg/l)	5	8.13	10.2	9.43	9.62
Iron (Dissolved)	(mg/l)	5	8.63	8.48	8.56	6.03
Lead	(mg/l)	0.0075	<0.0020	0.0025	0.0006J	0.0013J
Lead (Dissolved)	(mg/l)	0.0075	<0.0020	<0.0020	<0.0020	<0.0020
Mercury	(mg/l)	0.002	<0.00020	<0.00020	<0.00020	<0.00020
Mercury (Dissolved)	(mg/l)	0.002	<0.00020	<0.00020	<0.00020	<0.00020
Nickel	(mg/l)	0.1	0.0034J	0.0067J	<0.0100	0.0115

See Notes at End of Table

Appendix E-2
 Last Four Quarters of Groundwater Analytical Results
 Metals (Total and Dissolved)
 1st through 4th Quarter 2006
 The Hartford Working Group / Hartford, Illinois
 1190505040 -- Madison County -- ILR000128249

PERIOD: From 01/12/2006 thru 10/12/2006 - Inclusive

SAMPLE TYPE: Water

CONSTITUENT	SITE	HMW-29	HMW-29	HMW-29	HMW-29	HMW-29
	SAMPLE ID	DUP001/060113	HMW-29/060406	DUP-001/060406	HMW-29/060710	HMW-29/061012
	DATE	COMPARISON	01/13/2006	04/06/2006	04/06/2006	07/10/2006
	RESULT TYPE	VALUE	Duplicate 1	Primary	Duplicate 1	Primary
Nickel (Dissolved)	(mg/l)	0.1	<0.0100	<0.0100	<0.0100	0.0079J
Selenium	(mg/l)	0.05	<0.0060	<0.0060	<0.0060	<0.0060
Selenium (Dissolved)	(mg/l)	0.05	<0.0060	<0.0060	<0.0060	<0.0060
Silver	(mg/l)	0.05	<0.0100	<0.0100	<0.0100	0.0043J
Silver (Dissolved)	(mg/l)	0.05	<0.0100	<0.0100	<0.0100	0.0040J
Vanadium	(mg/l)	0.049	0.0075J	<0.0100	<0.0100	<0.0100
Vanadium (Dissolved)	(mg/l)	0.049	<0.0100	<0.0100	<0.0100	0.0085J
Zinc	(mg/l)	5	<0.0100	<0.0064J	<0.0027J	0.0118
Zinc (Dissolved)	(mg/l)	5	0.0033J	0.0034J	<0.0100	0.0047J

See Notes at End of Table

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Date: 03/17/2007

Last Four Quarters of Groundwater Analytical Results

Metals (Total and Dissolved)

1st through 4th Quarter 2006

The Hartford Working Group / Hartford, Illinois
 1190505040 -- Madison County -- ILR000128249

PERIOD: From 01/12/2006 thru 10/12/2006 - Inclusive

SAMPLE TYPE: Water

CONSTITUENT	SITE	HMW-38C	HMW-39B	HMW-39B	HMW-39B	HMW-39B	
	SAMPLE ID	HMW-38C/061010	HMW-39B/060112	HMW-39B/060406	HMW-39B/060710	HMW-39B/061010	
	DATE	COMPARISON	10/10/2006	01/12/2006	04/06/2006	07/10/2006	10/10/2006
	RESULT TYPE	VALUE	Primary	Primary	Primary	Primary	Primary
Antimony	(mg/l)	0.006	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Antimony (Dissolved)	(mg/l)	0.006	<0.0050	0.0027J	<0.0050	<0.0050	<0.0050
Arsenic	(mg/l)	0.05	0.0982	0.0012J	<0.0030	0.0095	0.0008J
Arsenic (Dissolved)	(mg/l)	0.05	0.0956	<0.0030	<0.0030	<0.0030	<0.0030
Barium	(mg/l)	2	0.269	0.304	0.300	0.506	0.313
Barium (Dissolved)	(mg/l)	2	0.256	0.224	0.266	0.225	0.181
Beryllium	(mg/l)	0.004	<0.0010	<0.0010	<0.0010	0.0007J	<0.0010
Beryllium (Dissolved)	(mg/l)	0.004	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Cadmium	(mg/l)	0.005	<0.0020	0.0003J	<0.0020	0.0009J	<0.0020
Cadmium (Dissolved)	(mg/l)	0.005	<0.0020	0.0019J	<0.0020	0.0004J	<0.0020
Chromium	(mg/l)	0.1	<0.0100	<0.0100	<0.0100	0.0298	0.0078J
Chromium (Dissolved)	(mg/l)	0.1	0.0065J	<0.0100	<0.0100	0.0040J	0.0049J
Cobalt	(mg/l)	1	0.0032J	<0.0100	<0.0100	0.0125	0.0025J
Cobalt (Dissolved)	(mg/l)	1	<0.0100	<0.0100	<0.0100	0.0046J	<0.0100
Iron	(mg/l)	5	35.2	0.319	0.0419	29.3	6.49
Iron (Dissolved)	(mg/l)	5	33.8	<0.0200	<0.0200	<0.0200	0.0099J
Lead	(mg/l)	0.0075	0.0037	<0.0020	0.0005J	0.0183	0.0048
Lead (Dissolved)	(mg/l)	0.0075	0.0023	<0.0020	<0.0020	<0.0020	0.0008J
Mercury	(mg/l)	0.002	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020
Mercury (Dissolved)	(mg/l)	0.002	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020

See Notes at End of Table

Appendix E-2

Last Four Quarters of Groundwater Analytical Results

Metals (Total and Dissolved)

1st through 4th Quarter 2006

The Hartford Working Group / Hartford, Illinois
1190505040 – Madison County -- ILR000128249

PERIOD: From 01/12/2006 thru 10/12/2006 - Inclusive

SAMPLE TYPE: Water

CONSTITUENT	SITE	HMW-38C	HMW-39B	HMW-39B	HMW-39B	HMW-39B
	SAMPLE ID	HMW-38C/061010	HMW-39B/060112	HMW-39B/060406	HMW-39B/060710	HMW-39B/061010
	DATE	10/10/2006	01/12/2006	04/06/2006	07/10/2006	10/10/2006
	RESULT TYPE	Primary	Primary	Primary	Primary	Primary
Nickel	(mg/l)	0.1	<0.0100	<0.0100	<0.0100	0.0399
Nickel (Dissolved)	(mg/l)	0.1	<0.0100	<0.0100	<0.0100	0.0052J
Selenium	(mg/l)	0.05	<0.0060	<0.0060	<0.0060	<0.0060
Selenium (Dissolved)	(mg/l)	0.05	<0.0060	<0.0060	<0.0060	<0.0060
Silver	(mg/l)	0.05	<0.0100	<0.0100	<0.0100	<0.0100
Silver (Dissolved)	(mg/l)	0.05	<0.0100	<0.0100	<0.0100	0.0032J
Vanadium	(mg/l)	0.049	0.0099J	0.0041J	<0.0100	0.0479
Vanadium (Dissolved)	(mg/l)	0.049	<0.0100	<0.0100	<0.0100	<0.0100
Zinc	(mg/l)	5	<0.0100	0.0724	0.0242	0.176
Zinc (Dissolved)	(mg/l)	5	<0.0100	0.0507	0.0211	0.0106

See Notes at End of Table

Last Four Quarters of Groundwater Analytical Results

Metals (Total and Dissolved)

1st through 4th Quarter 2006

The Hartford Working Group / Hartford, Illinois
1190505040 -- Madison County -- ILR000128249

PERIOD: From 01/12/2006 thru 10/12/2006 - Inclusive

SAMPLE TYPE: Water

CONSTITUENT	SITE	HMW-39C	HMW-39C	HMW-39C	HMW-39C	HMW-39C
	SAMPLE ID	HMW-39C/060113	HMW-39C/060406	HMW-39C/060711	HMW-39C/061011	HMW-40C/060113
	DATE	COMPARISON	01/13/2006	04/06/2006	07/11/2006	10/11/2006
	RESULT TYPE	VALUE	Primary	Primary	Primary	Primary
Antimony	(mg/l)	0.006	<0.0050	<0.0050	<0.0050	<0.0050
Antimony (Dissolved)	(mg/l)	0.006	0.0018J	<0.0050	<0.0050	<0.0050
Arsenic	(mg/l)	0.05	<0.0030	<0.0030	<0.0030	<0.0030
Arsenic (Dissolved)	(mg/l)	0.05	<0.0030	0.0010J	<0.0030	<0.0030
Barium	(mg/l)	2	0.350	0.343	0.348	0.330
Barium (Dissolved)	(mg/l)	2	0.349	0.299	0.318	0.328
Beryllium	(mg/l)	0.004	<0.0010	<0.0010	<0.0010	<0.0010
Beryllium (Dissolved)	(mg/l)	0.004	<0.0010	<0.0010	<0.0010	<0.0010
Cadmium	(mg/l)	0.005	0.0427	<0.0020	0.0003J	<0.0020
Cadmium (Dissolved)	(mg/l)	0.005	0.0005J	<0.0020	0.0004J	<0.0020
Chromium	(mg/l)	0.1	<0.0100	<0.0100	<0.0100	<0.0100
Chromium (Dissolved)	(mg/l)	0.1	<0.0100	<0.0100	<0.0100	<0.0100
Cobalt	(mg/l)	1	<0.0100	<0.0100	<0.0100	<0.0100
Cobalt (Dissolved)	(mg/l)	1	0.0038J	<0.0100	<0.0100	<0.0100
Iron	(mg/l)	5	6.93	4.73	3.97	4.26
Iron (Dissolved)	(mg/l)	5	4.33	3.36	3.50	3.96
Lead	(mg/l)	0.0075	0.0013J	0.0009J	0.0005J	<0.0020
Lead (Dissolved)	(mg/l)	0.0075	<0.0020	<0.0020	<0.0020	<0.0020
Mercury	(mg/l)	0.002	<0.00020	<0.00020	<0.00020	<0.00020
Mercury (Dissolved)	(mg/l)	0.002	<0.00020	<0.00020	<0.00020	<0.00020

See Notes at End of Table

Appendix E-2

Last Four Quarters of Groundwater Analytical Results

Metals (Total and Dissolved)

1st through 4th Quarter 2006

The Hartford Working Group / Hartford, Illinois
 1190505040 -- Madison County -- ILR000128249

PERIOD: From 01/12/2006 thru 10/12/2006 - Inclusive

SAMPLE TYPE: Water

CONSTITUENT	SITE	HMW-39C	HMW-39C	HMW-39C	HMW-39C	HMW-39C	HMW-40C
	SAMPLE ID	HMW-39C/060113	HMW-39C/060406	HMW-39C/060711	HMW-39C/061011	HMW-40C/060113	
	DATE	01/13/2006	04/06/2006	07/11/2006	10/11/2006	01/13/2006	
	RESULT TYPE	COMPARISON	Primary	Primary	Primary	Primary	Primary
Nickel	(mg/l)	0.1	0.0038J	<0.0100	<0.0100	<0.0100	0.0043J
Nickel (Dissolved)	(mg/l)	0.1	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100
Selenium	(mg/l)	0.05	<0.0060	<0.0060	<0.0060	<0.0060	0.0172
Selenium (Dissolved)	(mg/l)	0.05	<0.0060	<0.0060	<0.0060	<0.0060	0.0050J
Silver	(mg/l)	0.05	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100
Silver (Dissolved)	(mg/l)	0.05	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100
Vanadium	(mg/l)	0.049	0.0092J	<0.0100	<0.0100	0.0060J	0.0157
Vanadium (Dissolved)	(mg/l)	0.049	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100
Zinc	(mg/l)	5	0.0243	0.0655	0.0116	<0.0100	0.0180
Zinc (Dissolved)	(mg/l)	5	0.0141	0.0663	0.0037J	<0.0100	0.0039J

See Notes at End of Table

Appendix E-2

Last Four Quarters of Groundwater Analytical Results

Metals (Total and Dissolved)

1st through 4th Quarter 2006

The Hartford Working Group / Hartford, Illinois

1190505040 -- Madison County -- ILR000128249

PERIOD: From 01/12/2006 thru 10/12/2006 - Inclusive

SAMPLE TYPE: Water

CONSTITUENT	SITE	HMW-40C	HMW-40C	HMW-40C	HMW-40C	HMW-40C
	SAMPLE ID	DUP-002/060113	HMW-40C/060406	HMW-40C/060711	HMW-40C/061010	DUP-002/061010
	DATE	COMPARISON	01/13/2006	04/06/2006	07/11/2006	10/10/2006
RESULT TYPE	VALUE	Duplicate 1	Primary	Primary	Primary	Duplicate 1
Antimony	(mg/l)	0.006	<0.0050	<0.0050	<0.0050	<0.0050
Antimony (Dissolved)	(mg/l)	0.006	<0.0050	<0.0050	<0.0050	<0.0050
Arsenic	(mg/l)	0.05	0.0531	0.116	0.0917	0.362
Arsenic (Dissolved)	(mg/l)	0.05	0.0153	0.0145	0.0235	0.0253
Barium	(mg/l)	2	0.732	0.904	0.646	1.05
Barium (Dissolved)	(mg/l)	2	0.638	0.763	0.541	0.706
Beryllium	(mg/l)	0.004	0.0003J	<0.0010	<0.0010	<0.0010
Beryllium (Dissolved)	(mg/l)	0.004	<0.0010	<0.0010	<0.0010	<0.0010
Cadmium	(mg/l)	0.005	0.0048	0.0005J	0.0018J	<0.0020
Cadmium (Dissolved)	(mg/l)	0.005	<0.0020	<0.0020	0.0004J	<0.0020
Chromium	(mg/l)	0.1	<0.0100	<0.0100	<0.0100	0.0071J
Chromium (Dissolved)	(mg/l)	0.1	<0.0100	<0.0100	<0.0100	0.0058J
Cobalt	(mg/l)	1	0.0022J	<0.0100	<0.0100	<0.0100
Cobalt (Dissolved)	(mg/l)	1	<0.0100	<0.0100	0.0040J	<0.0100
Iron	(mg/l)	5	19.6	32.2	17.0	80.3
Iron (Dissolved)	(mg/l)	5	4.06	6.64	3.52	7.34
Lead	(mg/l)	0.0075	0.0012J	0.0012J	0.0004J	0.0020
Lead (Dissolved)	(mg/l)	0.0075	<0.0020	0.0015J	<0.0020	0.0013J
Mercury	(mg/l)	0.002	<0.00020	<0.00020	<0.00020	<0.00020
Mercury (Dissolved)	(mg/l)	0.002	<0.00020	<0.00020	<0.00020	<0.00020

See Notes at End of Table

Appendix E-2
 Last Four Quarters of Groundwater Analytical Results
 Metals (Total and Dissolved)
 1st through 4th Quarter 2006
 The Hartford Working Group / Hartford, Illinois
 1190505040 -- Madison County -- ILR000128249

PERIOD: From 01/12/2006 thru 10/12/2006 - Inclusive

SAMPLE TYPE: Water

CONSTITUENT	SITE	COMPARISON	HMW-40C	HMW-40C	HMW-40C	HMW-40C	HMW-40C
	SAMPLE ID		DUP-002/060113	HMW-40C/060406	HMW-40C/060711	HMW-40C/061010	DUP-002/061010
	DATE		01/13/2006	04/06/2006	07/11/2006	10/10/2006	10/10/2006
	RESULT TYPE		Duplicate 1	Primary	Primary	Primary	Duplicate 1
Nickel	(mg/l)	0.1	0.0035J	0.0069J	0.0107	0.0042J	<0.0100
Nickel (Dissolved)	(mg/l)	0.1	<0.0100	0.0051J	0.0061J	<0.0100	<0.0100
Selenium	(mg/l)	0.05	0.0112	0.0169	0.0287	0.0421	0.0166
Selenium (Dissolved)	(mg/l)	0.05	0.0051J	<0.0060	0.0184	<0.0060	0.0036J
Silver	(mg/l)	0.05	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100
Silver (Dissolved)	(mg/l)	0.05	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100
Vanadium	(mg/l)	0.049	0.0139	0.0057J	<0.0100	<0.0100	0.0094J
Vanadium (Dissolved)	(mg/l)	0.049	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100
Zinc	(mg/l)	5	0.0088J	0.0272	0.0191	0.0335	0.0124
Zinc (Dissolved)	(mg/l)	5	0.0027J	0.0081J	0.0072J	<0.0100	<0.0100

See Notes at End of Table

Appendix E-2
 Last Four Quarters of Groundwater Analytical Results
 Metals (Total and Dissolved)
 1st through 4th Quarter 2006
 The Hartford Working Group / Hartford, Illinois
 1190505040 -- Madison County -- ILR000128249

PERIOD: From 01/12/2006 thru 10/12/2006 - Inclusive

SAMPLE TYPE: Water

CONSTITUENT	SITE	COMPARISON	HMW-43C	HMW-43C	HMW-44D	HMW-47B	HMW-48C
	SAMPLE ID		HMW-43C/061010	DUP-001/061010	HMW-44D/061011	HMW-47B/061010	HMW-48C/060623
	DATE		10/10/2006	10/10/2006	10/11/2006	10/10/2006	06/23/2006
RESULT TYPE	VALUE		Primary	Duplicate 1	Primary	Primary	Primary
Antimony	(mg/l)	0.006	<0.0050	<0.0050	<0.0050	0.0023J	<0.0500
Antimony (Dissolved)	(mg/l)	0.006	<0.0050	<0.0050	<0.0050	<0.0050	<0.0500
Arsenic	(mg/l)	0.05	0.0247	0.0351	<0.0030	0.0078	<0.0250
Arsenic (Dissolved)	(mg/l)	0.05	0.0233	0.0195	<0.0030	0.0041	<0.0250
Barium	(mg/l)	2	0.190	0.191	0.588	0.318	NA
Barium (Dissolved)	(mg/l)	2	0.178	0.180	0.564	0.253	NA
Beryllium	(mg/l)	0.004	<0.0010	<0.0010	<0.0010	<0.0010	0.0003J
Beryllium (Dissolved)	(mg/l)	0.004	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Cadmium	(mg/l)	0.005	<0.0020	<0.0020	<0.0020	0.0015J	0.0743
Cadmium (Dissolved)	(mg/l)	0.005	<0.0020	<0.0020	<0.0020	<0.0020	0.0010J
Chromium	(mg/l)	0.1	<0.0100	<0.0100	<0.0100	<0.0100	0.0057J
Chromium (Dissolved)	(mg/l)	0.1	0.0058J	0.0057J	<0.0100	<0.0100	<0.0100
Cobalt	(mg/l)	1	<0.0100	0.0027J	<0.0100	<0.0100	NA
Cobalt (Dissolved)	(mg/l)	1	<0.0100	<0.0100	<0.0100	0.0027J	NA
Iron	(mg/l)	5	10.7	10.7	13.7	4.18	18.8
Iron (Dissolved)	(mg/l)	5	10.4S	9.94	13.8	115	14.1
Lead	(mg/l)	0.0075	0.0020J	0.0007J	<0.0020	0.0010J	0.650
Lead (Dissolved)	(mg/l)	0.0075	<0.0020	<0.0020	<0.0020	<0.0020	0.019J
Mercury	(mg/l)	0.002	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020
Mercury (Dissolved)	(mg/l)	0.002	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020

See Notes at End of Table

Appendix E-2
 Last Four Quarters of Groundwater Analytical Results
 Metals (Total and Dissolved)
 1st through 4th Quarter 2006
 The Hartford Working Group / Hartford, Illinois
 1190505040 -- Madison County -- ILR000128249

PERIOD: From 01/12/2006 thru 10/12/2006 - Inclusive

SAMPLE TYPE: Water

CONSTITUENT	SITE	HMW-43C	HMW-43C	HMW-44D	HMW-47B	HMW-48C	
	SAMPLE ID	HMW-43C/061010	DUP-001/061010	HMW-44D/061011	HMW-47B/061010	HMW-48C/060623	
	DATE	10/10/2006	10/10/2006	10/11/2006	10/10/2006	06/23/2006	
	RESULT TYPE	Primary	Duplicate 1	Primary	Primary	Primary	
Nickel	(mg/l)	0.1	0.0058J	0.0052J	<0.0100	<0.0100	0.0086J
Nickel (Dissolved)	(mg/l)	0.1	<0.0100	<0.0035J	<0.0100	<0.0100	<0.0100
Selenium	(mg/l)	0.05	<0.0060	<0.0060	<0.0060	<0.0060	<0.0500
Selenium (Dissolved)	(mg/l)	0.05	<0.0060	<0.0060	<0.0060	<0.0060	<0.0500
Silver	(mg/l)	0.05	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100
Silver (Dissolved)	(mg/l)	0.05	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100
Vanadium	(mg/l)	0.049	<0.0100	<0.0100	0.0063J	0.0043J	NA
Vanadium (Dissolved)	(mg/l)	0.049	<0.0100	<0.0100	<0.0100	<0.0100	NA
Zinc	(mg/l)	5	<0.0100	0.145	<0.0100	0.169	0.178
Zinc (Dissolved)	(mg/l)	5	<0.0100	<0.0100	<0.0100	0.0060J	0.0036J

See Notes at End of Table

Appendix E-2
 Last Four Quarters of Groundwater Analytical Results
 Metals (Total and Dissolved)
 1st through 4th Quarter 2006
 The Hartford Working Group / Hartford, Illinois
 1190505040 -- Madison County -- ILR000128249

PERIOD: From 01/12/2006 thru 10/12/2006 - Inclusive

SAMPLE TYPE: Water

CONSTITUENT	SITE	HMW-48D	HMW-49B	HMW-49B	HMW-49C	HMW-49C
	SAMPLE ID	HMW-48D/061010	HMW-49B/060112	HMW-49B/060406	HMW-49C/060113	HMW-49C/060406
	DATE	COMPARISON	10/10/2006	01/12/2006	04/06/2006	01/13/2006
	RESULT TYPE	VALUE	Primary	Primary	Primary	Primary
Antimony	(mg/l)	0.006	<0.0050	<0.0050	<0.0050	<0.0050
Antimony (Dissolved)	(mg/l)	0.006	<0.0050	<0.0050	0.0020J	0.0021J
Arsenic	(mg/l)	0.05	0.0023J	0.0244	0.0251	0.0075
Arsenic (Dissolved)	(mg/l)	0.05	<0.0030	0.0201	0.0251	0.0046
Barium	(mg/l)	2	0.352	0.620	0.748	0.432
Barium (Dissolved)	(mg/l)	2	0.338	0.495	0.602	0.317
Beryllium	(mg/l)	0.004	<0.0010	0.0004J	0.0003J	0.0007J
Beryllium (Dissolved)	(mg/l)	0.004	<0.0010	0.0006J	<0.0010	<0.0010
Cadmium	(mg/l)	0.005	<0.0020	0.0618	0.0093	0.0049
Cadmium (Dissolved)	(mg/l)	0.005	<0.0020	0.0007J	0.0009J	0.0006J
Chromium	(mg/l)	0.1	0.0041J	<0.0100	0.0076J	0.0246
Chromium (Dissolved)	(mg/l)	0.1	0.0061J	<0.0100	0.0070J	<0.0100
Cobalt	(mg/l)	1	<0.0100	0.0070J	0.0091J	0.0093J
Cobalt (Dissolved)	(mg/l)	1	<0.0100	0.0042J	0.0067J	0.0034J
Iron	(mg/l)	5	27.0	21.6	27.9	37.7
Iron (Dissolved)	(mg/l)	5	24.3	16.6	16.8	22.5
Lead	(mg/l)	0.0075	0.0031	0.0063	0.0064	0.0266
Lead (Dissolved)	(mg/l)	0.0075	0.0009J	0.0022	0.0034	0.0141
Mercury	(mg/l)	0.002	<0.00020	<0.00020	<0.00020	<0.00020
Mercury (Dissolved)	(mg/l)	0.002	<0.00020	<0.00020	<0.00020	<0.00020

See Notes at End of Table

Appendix E-2
 Last Four Quarters of Groundwater Analytical Results
 Metals (Total and Dissolved)
 1st through 4th Quarter 2006
 The Hartford Working Group / Hartford, Illinois
 1190505040 -- Madison County -- ILR000128249

PERIOD: From 01/12/2006 thru 10/12/2006 - Inclusive

SAMPLE TYPE: Water

CONSTITUENT	SITE	HMW-48D	HMW-49B	HMW-49B	HMW-49C	HMW-49C	
	SAMPLE ID	HMW-48D/061010	HMW-49B/060112	HMW-49B/060406	HMW-49C/060113	HMW-49C/060406	
	DATE	10/10/2006	01/12/2006	04/06/2006	01/13/2006	04/06/2006	
	RESULT TYPE	Primary	Primary	Primary	Primary	Primary	
Nickel	(mg/l)	0.1	<0.0100	0.0043J	0.0080J	0.0254	0.0087J
Nickel (Dissolved)	(mg/l)	0.1	<0.0100	0.0043J	0.0035J	<0.0100	0.0071J
Selenium	(mg/l)	0.05	<0.0060	<0.0060	<0.0060	<0.0060	<0.0060
Selenium (Dissolved)	(mg/l)	0.05	<0.0060	<0.0060	<0.0060	<0.0060	<0.0060
Silver	(mg/l)	0.05	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100
Silver (Dissolved)	(mg/l)	0.05	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100
Vanadium	(mg/l)	0.049	<0.0100	0.0080J	0.0077J	0.0383	0.0081J
Vanadium (Dissolved)	(mg/l)	0.049	0.0064J	<0.0100	<0.0061J	<0.0100	<0.0100
Zinc	(mg/l)	5	0.0200	0.510	0.162	0.196	0.0904
Zinc (Dissolved)	(mg/l)	5	0.0283	0.0177	0.0139	0.00490	0.0290

See Notes at End of Table

Appendix E-2
 Last Four Quarters of Groundwater Analytical Results
 Metals (Total and Dissolved)
 1st through 4th Quarter 2006
 The Hartford Working Group / Hartford, Illinois
 1190505040 – Madison County – ILR000128249

PERIOD: From 01/12/2006 thru 10/12/2006 - Inclusive

SAMPLE TYPE: Water

CONSTITUENT	SITE	COMPARISON	HMW-49C	HMW-49C	HMW-49D	HMW-49D	HMW-49D
	SAMPLE ID		HMW-49C/060710	HMW-49C/061011	HMW-49D/060113	HMW-49D/060406	DUP-001/060406
	DATE	RESULT TYPE	07/10/2006	10/11/2006	01/13/2006	04/06/2006	04/06/2006
		VALUE	Primary	Primary	Primary	Primary	Duplicate 1
Antimony	(mg/l)	0.006	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Antimony (Dissolved)	(mg/l)	0.006	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Arsenic	(mg/l)	0.05	0.0077	0.0067	<0.0030	0.0009J	0.0012J
Arsenic (Dissolved)	(mg/l)	0.05	0.0047	0.0050	<0.0030	<0.0030	0.0008J
Barium	(mg/l)	2	0.371	0.342	0.332	0.356	0.355
Barium (Dissolved)	(mg/l)		0.318	0.317	0.291	0.326	0.343
Beryllium	(mg/l)	0.004	<0.0010	<0.0010	0.0008J	<0.0010	<0.0010
Beryllium (Dissolved)	(mg/l)	0.004	<0.0010	<0.0010	0.0008J	<0.0010	0.0003J
Cadmium	(mg/l)	0.005	0.0014J	<0.0020	0.0018J	0.0009J	0.0004J
Cadmium (Dissolved)	(mg/l)	0.005	0.0005J	<0.0020	0.0011J	0.0012J	0.0011J
Chromium	(mg/l)	0.1	0.0133	<0.0100	<0.0100	0.0080J	0.0073J
Chromium (Dissolved)	(mg/l)	0.1	0.0057J	0.0058J	<0.0100	0.0046J	0.0052J
Cobalt	(mg/l)	1	0.0118	<0.0100	<0.0100	<0.0100	<0.0100
Cobalt (Dissolved)	(mg/l)	1	0.0056J	<0.0100	<0.0100	<0.0100	<0.0100
Iron	(mg/l)	5	28.8	19.4	27.1S	31.8	32.4
Iron (Dissolved)	(mg/l)	5	18.6	17.3	25.4S	20.0	28.3
Lead	(mg/l)	0.0075	0.0154	0.0197	0.0020J	0.0045	0.0046
Lead (Dissolved)	(mg/l)	0.0075	0.0129	0.0162	<0.0020	0.0006J	0.0038
Mercury	(mg/l)	0.002	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020
Mercury (Dissolved)	(mg/l)	0.002	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020

See Notes at End of Table

Appendix E-2
 Last Four Quarters of Groundwater Analytical Results
 Metals (Total and Dissolved)
 1st through 4th Quarter 2006
 The Hartford Working Group / Hartford, Illinois
 1190505040 -- Madison County -- ILR000128249

PERIOD: From 01/12/2006 thru 10/12/2006 - Inclusive

SAMPLE TYPE: Water

CONSTITUENT	SITE	COMPARISON	HMW-49C	HMW-49C	HMW-49D	HMW-49D	HMW-49D
	SAMPLE ID		HMW-49C/060710	HMW-49C/061011	HMW-49D/060113	HMW-49D/060406	DUP-001/060406
	DATE		07/10/2006	10/11/2006	01/13/2006	04/06/2006	04/06/2006
	RESULT TYPE	VALUE	Primary	Primary	Primary	Primary	Duplicate 1
Nickel	(mg/l)	0.1	0.0227	<0.0100	<0.0100	0.0068J	0.0070J
Nickel (Dissolved)	(mg/l)	0.1	0.0144	<0.0100	<0.0100	0.0049J	0.0059J
Selenium	(mg/l)	0.05	<0.0060	<0.0060	<0.0060	<0.0060	<0.0060
Selenium (Dissolved)	(mg/l)	0.05	<0.0060	<0.0060	<0.0060	<0.0060	<0.0060
Silver	(mg/l)	0.05	0.0034J	<0.0100	<0.0100	<0.0100	<0.0100
Silver (Dissolved)	(mg/l)	0.05	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100
Vanadium	(mg/l)	0.049	0.0054J	0.0035J	0.0046J	0.0062J	0.0040J
Vanadium (Dissolved)	(mg/l)	0.049	<0.0100	<0.0100	0.0071J	<0.0100	0.0048J
Zinc	(mg/l)	5	0.152	0.0347	0.0166	0.0321	0.0319
Zinc (Dissolved)	(mg/l)	5	0.0060J	0.0029J	<0.0100	0.0065J	0.0288

See Notes at End of Table

Appendix E-2
 Last Four Quarters of Groundwater Analytical Results
 Metals (Total and Dissolved)
 1st through 4th Quarter 2006
 The Hartford Working Group / Hartford, Illinois
 1190505040 -- Madison County -- ILR000128249

PERIOD: From 01/12/2006 thru 10/12/2006 - Inclusive

SAMPLE TYPE: Water

CONSTITUENT	SITE	HMW-49D	HMW-49D	HMW-49D	HMW-49D	HMW-50A
	SAMPLE ID	HMW-49D/060710	Dup-001/060710	HMW-49D/061010	DUP-003/061010	HMW-50A/060112
	DATE	COMPARISON	07/10/2006	07/10/2006	10/10/2006	10/10/2006
	RESULT TYPE	VALUE	Primary	Duplicate 1	Primary	Duplicate 1
Antimony	(mg/l)	0.006	<0.0050	<0.0050	<0.0050	<0.0050
Antimony (Dissolved)	(mg/l)	0.006	<0.0050	<0.0050	<0.0050	<0.0050
Arsenic	(mg/l)	0.05	0.0013J	0.0029J	<0.0030	<0.0030
Arsenic (Dissolved)	(mg/l)	0.05	<0.0030	<0.0030	<0.0030	<0.0030
Barium	(mg/l)	2	0.372	0.368	0.351	0.323
Barium (Dissolved)	(mg/l)	2	0.291	0.290	0.298	0.304
Beryllium	(mg/l)	0.004	<0.0010	<0.0010	<0.0010	<0.0010
Beryllium (Dissolved)	(mg/l)	0.004	<0.0010	<0.0010	<0.0010	<0.0010
Cadmium	(mg/l)	0.005	0.0014J	0.0016J	<0.0020	<0.0020
Cadmium (Dissolved)	(mg/l)	0.005	0.0005J	0.0012J	<0.0020	<0.0020
Chromium	(mg/l)	0.1	0.0055J	0.0075J	0.0040J	<0.0100
Chromium (Dissolved)	(mg/l)	0.1	<0.0100	0.0052J	0.0067J	0.0066J
Cobalt	(mg/l)	1	0.0055J	0.0074J	<0.0100	<0.0100
Cobalt (Dissolved)	(mg/l)	1	0.0044J	0.0053J	<0.0100	<0.0100
Iron	(mg/l)	5	30.7	31.2	30.4	29.2
Iron (Dissolved)	(mg/l)	5	27.1	26.8	27.8	27.7
Lead	(mg/l)	0.0075	0.0062	0.0058	0.0045	0.0018J
Lead (Dissolved)	(mg/l)	0.0075	<0.0020	0.0005J	0.0009J	<0.0020
Mercury	(mg/l)	0.002	<0.00020	<0.00020	<0.00020	<0.00020
Mercury (Dissolved)	(mg/l)	0.002	<0.00020	<0.00020	<0.00020	<0.00020
Nickel	(mg/l)	0.1	0.0174	0.0174	<0.0100	<0.0100

See Notes at End of Table

Appendix E-2
Last Four Quarters of Groundwater Analytical Results
Metals (Total and Dissolved)
1st through 4th Quarter 2006
The Hartford Working Group / Hartford, Illinois
1190505040 -- Madison County -- ILR000128249

PERIOD: From 01/12/2006 thru 10/12/2006 - Inclusive

SAMPLE TYPE: Water

CONSTITUENT	SITE	HMW-49D	HMW-49D	HMW-49D	HMW-49D	HMW-50A
	SAMPLE ID	HMW-49D/060710	Dup-001/060710	HMW-49D/061010	DUP-003/061010	HMW-50A/060112
	DATE	COMPARISON	07/10/2006	07/10/2006	10/10/2006	10/10/2006
	RESULT TYPE	VALUE	Primary	Duplicate 1	Primary	Duplicate 1
Nickel (Dissolved)	(mg/l)	0.1	0.0129	0.0147	<0.0100	<0.0100
Selenium	(mg/l)	0.05	<0.0060	<0.0060	<0.0060	<0.0060
Selenium (Dissolved)	(mg/l)	0.05	<0.0060	<0.0060	<0.0060	<0.0060
Silver	(mg/l)	0.05	0.0038J	0.0033J	<0.0100	<0.0100
Silver (Dissolved)	(mg/l)	0.05	0.0032J	<0.0100	<0.0100	<0.0100
Vanadium	(mg/l)	0.049	0.0047J	0.0057J	0.0077J	0.0044J
Vanadium (Dissolved)	(mg/l)	0.049	<0.0100	<0.0100	<0.0100	<0.0100
Zinc	(mg/l)	5	0.0759	0.0719	0.0521	0.0294
Zinc (Dissolved)	(mg/l)	5	0.0026J	0.0022J	<0.0100	<0.0100
0.0267						

See Notes at End of Table

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Last Four Quarters of Groundwater Analytical Results

Metals (Total and Dissolved)

1st through 4th Quarter 2006

The Hartford Working Group / Hartford, Illinois

1190505040 -- Madison County -- ILR000128249

PERIOD: From 01/12/2006 thru 10/12/2006 - Inclusive

SAMPLE TYPE: Water

CONSTITUENT	SITE	HMW-50A	HMW-50A	HMW-50A	HMW-50A	HMW-50B
	SAMPLE ID	DUP-001/060112	HMW-50A/060407	HMW-50A/060711	HMW-50A/061010	HMW-50B/060113
	DATE	01/12/2006	04/07/2006	07/11/2006	10/10/2006	01/13/2006
	RESULT TYPE	COMPARISON	Duplicate 1	Primary	Primary	Primary
Antimony	(mg/l)	0.006	<0.0050	<0.0050	<0.0050	<0.0050
Antimony (Dissolved)	(mg/l)	0.006	<0.0050	<0.0050	<0.0050	<0.0050
Arsenic	(mg/l)	0.05	0.0031	0.0011J	<0.0030	<0.0030
Arsenic (Dissolved)	(mg/l)	0.05	0.0007J	0.0011J	0.0010J	<0.0030
Barium	(mg/l)	2	0.0607	0.0541	0.0579	0.0580
Barium (Dissolved)	(mg/l)	2	0.0552	0.0458	0.0436	0.0504
Beryllium	(mg/l)	0.004	<0.0010	0.0003J	<0.0010	<0.0010
Beryllium (Dissolved)	(mg/l)	0.004	<0.0010	0.0003J	<0.0010	<0.0010
Cadmium	(mg/l)	0.005	<0.0020	<0.0020	0.0007J	<0.0020
Cadmium (Dissolved)	(mg/l)	0.005	0.0014J	<0.0020	0.0005J	<0.0020
Chromium	(mg/l)	0.1	<0.0100	0.0059J	0.0040J	<0.0100
Chromium (Dissolved)	(mg/l)	0.1	<0.0100	<0.0100	<0.0100	0.0047J
Cobalt	(mg/l)	1	<0.0100	<0.0100	0.0022J	<0.0100
Cobalt (Dissolved)	(mg/l)	1	<0.0100	<0.0100	0.0050J	<0.0100
Iron	(mg/l)	5	0.475	0.744	1.33	0.731
Iron (Dissolved)	(mg/l)	5	<0.0200	<0.0200	<0.0200	<0.0200
Lead	(mg/l)	0.0075	0.0020J	<0.0020	0.0005J	<0.0020
Lead (Dissolved)	(mg/l)	0.0075	<0.0020	<0.0020	<0.0020	0.0012J
Mercury	(mg/l)	0.002	<0.00020	<0.00020	<0.00020	<0.00020
Mercury (Dissolved)	(mg/l)	0.002	<0.00020	<0.00020	<0.00020	<0.00020
Nickel	(mg/l)	0.1	<0.0100	0.0058J	0.0080J	0.0048J

See Notes at End of Table

Appendix E-2
 Last Four Quarters of Groundwater Analytical Results
 Metals (Total and Dissolved)
 1st through 4th Quarter 2006
 The Hartford Working Group / Hartford, Illinois
 1190505040 -- Madison County -- ILR000128249

PERIOD: From 01/12/2006 thru 10/12/2006 - Inclusive

SAMPLE TYPE: Water

CONSTITUENT	SITE	COMPARISON	HMW-50A	HMW-50A	HMW-50A	HMW-50A	HMW-50B
	SAMPLE ID		DUP-001/060112	HMW-50A/060407	HMW-50A/060711	HMW-50A/061010	HMW-50B/060113
	DATE		01/12/2006	04/07/2006	07/11/2006	10/10/2006	01/13/2006
	RESULT TYPE		Duplicate 1	Primary	Primary	Primary	Primary
Nickel (Dissolved)	(mg/l)	0.1	<0.0100	0.0054J	0.0036J	<0.0100	<0.0100
Selenium	(mg/l)	0.05	<0.0060	<0.0060	<0.0060	<0.0060	<0.0060
Selenium (Dissolved)	(mg/l)	0.05	<0.0060	<0.0060	<0.0060	<0.0060	<0.0060
Silver	(mg/l)	0.05	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100
Silver (Dissolved)	(mg/l)	0.05	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100
Vanadium	(mg/l)	0.049	<0.0100	0.0045J	0.0061J	<0.0100	0.0040J
Vanadium (Dissolved)	(mg/l)	0.049	<0.0100	0.0042J	<0.0100	<0.0100	0.0098J
Zinc	(mg/l)	5	0.0344	0.0134	0.0277	<0.0100	0.0035J
Zinc (Dissolved)	(mg/l)	5	0.0286	0.0041J	0.0075J	<0.0100	<0.0100

See Notes at End of Table

Appendix E-2
 Last Four Quarters of Groundwater Analytical Results
 Metals (Total and Dissolved)
 1st through 4th Quarter 2006
 The Hartford Working Group / Hartford, Illinois
 1190505040 – Madison County – ILR000128249

PERIOD: From 01/12/2006 thru 10/12/2006 - Inclusive

SAMPLE TYPE: Water

CONSTITUENT	SITE	HMW-50B	HMW-50B	HMW-50B	HMW-50C	HMW-50C	
	SAMPLE ID	HMW-50B/060406	HMW-50B/060711	HMW-50B/061010	HMW-50C/060116	HMW-50C/060407	
	DATE	COMPARISON	04/06/2006	07/11/2006	10/10/2006	01/16/2006	04/07/2006
	RESULT TYPE	VALUE	Primary	Primary	Primary	Primary	Primary
Antimony	(mg/l)	0.006	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Antimony (Dissolved)	(mg/l)	0.006	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Arsenic	(mg/l)	0.05	<0.0030	<0.0030	<0.0030	<0.0030	<0.0030
Arsenic (Dissolved)	(mg/l)	0.05	<0.0030	<0.0008J	<0.0030	<0.0030	<0.0010J
Barium	(mg/l)	2	0.332	0.289	0.215	0.337	0.381
Barium (Dissolved)	(mg/l)	2	0.274	0.273	0.193	0.314	0.340
Beryllium	(mg/l)	0.004	<0.0010	<0.0010	<0.0010	0.0008J	0.0003J
Beryllium (Dissolved)	(mg/l)	0.004	<0.0003J	<0.0010	<0.0010	<0.0006J	<0.0003J
Cadmium	(mg/l)	0.005	<0.0020	0.0013J	<0.0020	0.0011J	0.0011J
Cadmium (Dissolved)	(mg/l)	0.005	<0.0020	<0.0020	<0.0020	0.0011J	0.0013J
Chromium	(mg/l)	0.1	0.0059J	0.0042J	<0.0100	<0.0100	0.0042J
Chromium (Dissolved)	(mg/l)	0.1	<0.0100	<0.0100	<0.0050J	<0.0100	0.0064J
Cobalt	(mg/l)	1	<0.0100	0.0036J	<0.0100	<0.0100	<0.0100
Cobalt (Dissolved)	(mg/l)	1	<0.0100	0.0037J	<0.0100	<0.0100	0.0026J
Iron	(mg/l)	5	7.38	5.67	4.74	12.4	18.4S
Iron (Dissolved)	(mg/l)	5	4.66	5.22	3.02	8.81S	13.2
Lead	(mg/l)	0.0075	0.0012J	0.0006J	<0.0020	0.0006J	<0.0020
Lead (Dissolved)	(mg/l)	0.0075	<0.0020	<0.0020	<0.0011J	<0.0020	<0.0020
Mercury	(mg/l)	0.002	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020
Mercury (Dissolved)	(mg/l)	0.002	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020
Nickel	(mg/l)	0.1	<0.0100	0.0038J	<0.0100	<0.0100	0.0080J

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Last Four Quarters of Groundwater Analytical Results

Metals (Total and Dissolved)

1st through 4th Quarter 2006

The Hartford Working Group / Hartford, Illinois
1190505040 -- Madison County -- ILR000128249

PERIOD: From 01/12/2006 thru 10/12/2006 - Inclusive

SAMPLE TYPE: Water

CONSTITUENT	SITE	COMPARISON	HMW-50B	HMW-50B	HMW-50B	HMW-50C	HMW-50C
	SAMPLE ID		HMW-50B/060406	HMW-50B/060711	HMW-50B/061010	HMW-50C/060116	HMW-50C/060407
	DATE	RESULT TYPE	04/06/2006	07/11/2006	10/10/2006	01/16/2006	04/07/2006
		VALUE	Primary	Primary	Primary	Primary	Primary
Nickel (Dissolved)	(mg/l)	0.1	<0.0100	0.0033J	<0.0100	<0.0100	0.0048J
Selenium	(mg/l)	0.05	<0.0060	<0.0060	<0.0060S	<0.0060	<0.0060
Selenium (Dissolved)	(mg/l)	0.05	<0.0060	<0.0060	<0.0060	<0.0060	<0.0060
Silver	(mg/l)	0.05	<0.0100	<0.0100	<0.0100	<0.0091J	<0.0100
Silver (Dissolved)	(mg/l)	0.05	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100
Vanadium	(mg/l)	0.049	0.0041J	<0.0100	<0.0100	<0.0100	0.0032J
Vanadium (Dissolved)	(mg/l)	0.049	<0.0100	<0.0100	0.0086J	<0.0100	<0.0100
Zinc	(mg/l)	5	0.0098J	0.0071J	<0.0100	0.0639	0.0131
Zinc (Dissolved)	(mg/l)	5	0.0041J	0.0058J	<0.0100	0.0378	<0.0100

See Notes at End of Table

Appendix E-2
 Last Four Quarters of Groundwater Analytical Results
 Metals (Total and Dissolved)
 1st through 4th Quarter 2006
 The Hartford Working Group / Hartford, Illinois
 1190505040 -- Madison County -- ILR000128249

PERIOD: From 01/12/2006 thru 10/12/2006 - Inclusive

SAMPLE TYPE: Water

CONSTITUENT	SITE	COMPARISON	HMW-50C	HMW-50C	HMW-52C	HMW-52C	HMW-52C
	SAMPLE ID		HMW-50C/060710	HMW-50C/061009	HMW-52C/060112	HMW-52C/060407	HMW-52C/060710
	DATE	RESULT TYPE	07/10/2006	10/09/2006	01/12/2006	04/07/2006	07/10/2006
		VALUE	Primary	Primary	Primary	Primary	Primary
Antimony	(mg/l)	0.006	<0.0050	<0.0050	0.0020J	<0.0050	<0.0050
Antimony (Dissolved)	(mg/l)	0.006	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Arsenic	(mg/l)	0.05	<0.0030	<0.0030	0.0053	0.0089	0.0080
Arsenic (Dissolved)	(mg/l)	0.05	<0.0030	<0.0030	0.0022J	0.0022J	0.0026J
Barium	(mg/l)	2	0.290	0.256	0.461	0.504	0.495
Barium (Dissolved)	(mg/l)	2	0.257	0.247	0.320	0.368	0.358
Beryllium	(mg/l)	0.004	<0.0010	<0.0010	<0.0010	0.0005J	0.0004J
Beryllium (Dissolved)	(mg/l)	0.004	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Cadmium	(mg/l)	0.005	0.0015J	<0.0020	<0.0020	0.0036	0.0016J
Cadmium (Dissolved)	(mg/l)	0.005	0.0011J	<0.0020	<0.0012J	0.0013J	0.0010J
Chromium	(mg/l)	0.1	0.0074J	<0.0100	<0.0100	0.0150	0.0187
Chromium (Dissolved)	(mg/l)	0.1	0.0067J	0.0057J	<0.0100	0.0055J	0.0052J
Cobalt	(mg/l)	1	0.0056J	<0.0100	<0.0100	0.0037J	0.0083J
Cobalt (Dissolved)	(mg/l)	1	0.0064J	<0.0100	<0.0100	<0.0100	0.0039J
Iron	(mg/l)	5	14.4	2.63	21.0	32.2	29.6
Iron (Dissolved)	(mg/l)	5	0.756	0.184	16.6	13.6	14.4
Lead	(mg/l)	0.0075	0.0009J	0.0006J	0.0150	0.0330	0.0143
Lead (Dissolved)	(mg/l)	0.0075	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
Mercury	(mg/l)	0.002	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020
Mercury (Dissolved)	(mg/l)	0.002	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020

See Notes at End of Table

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Last Four Quarters of Groundwater Analytical Results

Metals (Total and Dissolved)

1st through 4th Quarter 2006

The Hartford Working Group / Hartford, Illinois
 1190505040 -- Madison County -- ILR000128249

PERIOD: From 01/12/2006 thru 10/12/2006 - Inclusive

SAMPLE TYPE: Water

CONSTITUENT	SITE	COMPARISON	HMW-50C	HMW-50C	HMW-52C	HMW-52C	HMW-52C
	SAMPLE ID		HMW-50C/060710	HMW-50C/061009	HMW-52C/060112	HMW-52C/060407	HMW-52C/060710
	DATE		07/10/2006	10/09/2006	01/12/2006	04/07/2006	07/10/2006
	RESULT TYPE		Primary	Primary	Primary	Primary	Primary
Nickel	(mg/l)	0.1	0.0081J	<0.0100	<0.0100	0.0162	0.0425
Nickel (Dissolved)	(mg/l)	0.1	0.0061J	<0.0100	<0.0100	0.0066J	0.0197
Selenium	(mg/l)	0.05	<0.0060	<0.0060	<0.0060	<0.0060	<0.0060
Selenium (Dissolved)	(mg/l)	0.05	<0.0060S	<0.0060	<0.0060	<0.0060	<0.0060
Silver	(mg/l)	0.05	0.0059J	<0.0100	<0.0100	<0.0100	0.0057J
Silver (Dissolved)	(mg/l)	0.05	<0.0100	<0.0100	<0.0100	<0.0100	0.0038J
Vanadium	(mg/l)	0.049	<0.0100	<0.0100	0.0093J	0.0083J	0.0242
Vanadium (Dissolved)	(mg/l)	0.049	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100
Zinc	(mg/l)	5	0.0090J	0.0093J	0.128	0.524	0.464
Zinc (Dissolved)	(mg/l)	5	0.0030J	<0.0100	0.0445	0.0069J	0.0099J

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Last Four Quarters of Groundwater Analytical Results

Metals (Total and Dissolved)

1st through 4th Quarter 2006

The Hartford Working Group / Hartford, Illinois

1190505040 – Madison County -- ILR000128249

PERIOD: From 01/12/2006 thru 10/12/2006 - Inclusive

SAMPLE TYPE: Water

CONSTITUENT	SITE	COMPARISON	HMW-52C	HMW-53C	HMW-54C	MP-59A	MP-78D
	SAMPLE ID		HMW-52C/061010	HMW-53C/061011	HMW-54C/061012	MP-59A/061011	MP-78D/061012
	DATE		10/10/2006	10/11/2006	10/12/2006	10/11/2006	10/12/2006
	RESULT TYPE	VALUE	Primary	Primary	Primary	Primary	Primary
Antimony	(mg/l)	0.006	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Antimony (Dissolved)	(mg/l)	0.006	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Arsenic	(mg/l)	0.05	0.0021J	0.0011J	<0.0030	0.0025J	0.0191
Arsenic (Dissolved)	(mg/l)	0.05	0.0015J	<0.0030	<0.0030	0.0014J	0.0144
Barium	(mg/l)	2	0.384	0.400	0.464	0.0466	0.190
Barium (Dissolved)	(mg/l)	2	0.358	0.382	0.492	0.0282	0.191
Beryllium	(mg/l)	0.004	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Beryllium (Dissolved)	(mg/l)	0.004	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Cadmium	(mg/l)	0.005	<0.0020	<0.0020	0.0003J	0.0009J	<0.0020
Cadmium (Dissolved)	(mg/l)	0.005	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
Chromium	(mg/l)	0.1	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100
Chromium (Dissolved)	(mg/l)	0.1	0.0063J	<0.0100	<0.0100	<0.0100	<0.0100
Cobalt	(mg/l)	1	0.0023J	<0.0100	<0.0100	<0.0100	<0.0100
Cobalt (Dissolved)	(mg/l)	1	<0.0100	<0.0100	<0.0100	0.0039J	<0.0100
Iron	(mg/l)	5	16.1	8.47	8.37	2.29	21.4S
Iron (Dissolved)	(mg/l)	5	14.3	6.76	7.22	0.011J	20.6
Lead	(mg/l)	0.0075	0.0068	0.0013J	0.0007J	0.0036	0.0023
Lead (Dissolved)	(mg/l)	0.0075	0.0029	<0.0020	<0.0020	0.0006J	0.0015J
Mercury	(mg/l)	0.002	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020
Mercury (Dissolved)	(mg/l)	0.002	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020
Nickel	(mg/l)	0.1	<0.0100	<0.0100	<0.0100	0.0089J	<0.0100

See Notes at End of Table

Appendix E-2
 Last Four Quarters of Groundwater Analytical Results
 Metals (Total and Dissolved)
 1st through 4th Quarter 2006
 The Hartford Working Group / Hartford, Illinois
 1190505040 – Madison County -- ILR000128249

PERIOD: From 01/12/2006 thru 10/12/2006 - Inclusive

SAMPLE TYPE: Water

CONSTITUENT	SITE	HMW-52C	HMW-53C	HMW-54C	MP-59A	MP-78D	
	SAMPLE ID	HMW-52C/061010	HMW-53C/061011	HMW-54C/061012	MP-59A/061011	MP-78D/061012	
	DATE	10/10/2006	10/11/2006	10/12/2006	10/11/2006	10/12/2006	
	RESULT TYPE	Primary	Primary	Primary	Primary	Primary	
Nickel (Dissolved)	(mg/l)	0.1	<0.0100	<0.0100	<0.0100	0.0040J	<0.0100
Selenium	(mg/l)	0.05	<0.0060	<0.0060	<0.0060	<0.0060	0.0050J
Selenium (Dissolved)	(mg/l)	0.05	<0.0060	<0.0060	<0.0060	<0.0060	0.0037J
Silver	(mg/l)	0.05	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100
Silver (Dissolved)	(mg/l)	0.05	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100
Vanadium	(mg/l)	0.049	0.0062J	0.0039J	0.0072J	0.0035J	<0.0100
Vanadium (Dissolved)	(mg/l)	0.049	<0.0100	<0.0100	0.0059J	0.0059J	0.0096J
Zinc	(mg/l)	5	0.0661	0.0122	<0.040J	0.0516	<0.0100
Zinc (Dissolved)	(mg/l)	5	0.0303	0.0050J	<0.0100	0.0040J	<0.0100

See Notes at End of Table

Appendix E-2
 Last Four Quarters of Groundwater Analytical Results
 Metals (Total and Dissolved)
 1st through 4th Quarter 2006
 The Hartford Working Group / Hartford, Illinois
 1190505040 -- Madison County -- ILR000128249

PERIOD: From 01/12/2006 thru 10/12/2006 - Inclusive

SAMPLE TYPE: Water

CONSTITUENT	SITE	MP-81C	MP-81C	MP-81C	MP-81C	MP-83C
	SAMPLE ID	MP-81C/060113	MP-81C/060406	DUP-002/060406	MP-81C/061011	MP-83C/061012
	DATE	COMPARISON	01/13/2006	04/06/2006	04/06/2006	10/11/2006
	RESULT TYPE	VALUE	Primary	Primary	Duplicate 1	Primary
Antimony	(mg/l)	0.006	<0.0050	<0.0050	<0.0050	<0.0050
Antimony (Dissolved)	(mg/l)	0.006	<0.0050	<0.0050	<0.0050	<0.0050
Arsenic	(mg/l)	0.05	<0.0030	0.0017J	<0.0030	0.0013J
Arsenic (Dissolved)	(mg/l)	0.05	0.0019J	<0.0030	<0.0030	0.0053
Barium	(mg/l)	2	0.0819	0.0953	0.0799	0.0697
Barium (Dissolved)	(mg/l)	2	0.0775	0.0725	0.0716	0.0649
Beryllium	(mg/l)	0.004	<0.0010	<0.0010	<0.0010	<0.0010
Beryllium (Dissolved)	(mg/l)	0.004	0.0004J	0.0003J	<0.0010	<0.0010
Cadmium	(mg/l)	0.005	0.0014J	0.0005J	<0.0020	0.0004J
Cadmium (Dissolved)	(mg/l)	0.005	0.0006J	<0.0020	<0.0020	<0.0020
Chromium	(mg/l)	0.1	<0.0100	0.0050J	<0.0100	<0.0100
Chromium (Dissolved)	(mg/l)	0.1	<0.0100	0.0059J	<0.0100	0.0054J
Cobalt	(mg/l)	1	0.0056J	0.0061J	0.0058J	0.0075J
Cobalt (Dissolved)	(mg/l)	1	0.0044J	0.0053J	0.0045J	0.0087J
Iron	(mg/l)	5	0.536	1.96	0.542	0.0313
Iron (Dissolved)	(mg/l)	5	0.0501	0.0949	0.105	0.805
Lead	(mg/l)	0.0075	0.0010J	0.0023	<0.0020	<0.0020
Lead (Dissolved)	(mg/l)	0.0075	<0.0020	<0.0020	<0.0020	<0.0020
Mercury	(mg/l)	0.002	<0.00020	<0.00020	<0.00020	<0.00020
Mercury (Dissolved)	(mg/l)	0.002	<0.00020	<0.00020	<0.00020	<0.00020
Nickel	(mg/l)	0.1	0.0272	0.0283	0.0241	0.0199

See Notes at End of Table

Appendix E-2

Last Four Quarters of Groundwater Analytical Results

Metals (Total and Dissolved)

1st through 4th Quarter 2006

The Hartford Working Group / Hartford, Illinois
1190505040 -- Madison County -- ILR000128249

PERIOD: From 01/12/2006 thru 10/12/2006 - Inclusive

SAMPLE TYPE: Water

CONSTITUENT	SITE	MP-81C	MP-81C	MP-81C	MP-81C	MP-81C	MP-83C
	SAMPLE ID	MP-81C/060113	MP-81C/060406	DUP-002/060406	MP-81C/061011	MP-83C/061012	
	DATE	01/13/2006	04/06/2006	04/06/2006	10/11/2006	10/12/2006	
	RESULT TYPE	COMPARISON	Primary	Primary	Duplicate 1	Primary	Primary
Nickel (Dissolved)	(mg/l)	0.1	0.0221	0.0214	0.0221	0.0213	<0.0100
Selenium	(mg/l)	0.05	<0.0060	<0.0060	<0.0060	<0.0060	0.0037J
Selenium (Dissolved)	(mg/l)	0.05	<0.0060	<0.0060	<0.0060	<0.0060	<0.0060
Silver	(mg/l)	0.05	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100
Silver (Dissolved)	(mg/l)	0.05	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100
Vanadium	(mg/l)	0.049	0.0092J	0.0060J	0.0036J	0.0089J	0.0087J
Vanadium (Dissolved)	(mg/l)	0.049	<0.0100	0.0034J	<0.0100	<0.0100	0.0074J
Zinc	(mg/l)	5	0.0047J	0.0207J	0.0080J	0.0036J	0.0042J
Zinc (Dissolved)	(mg/l)	5	0.0075J	0.0115	0.0085J	0.0044J	<0.0100

See Notes at End of Table

Appendix E-2
 Last Four Quarters of Groundwater Analytical Results
 Metals (Total and Dissolved)
 1st through 4th Quarter 2006
 The Hartford Working Group / Hartford, Illinois
 1190505040 -- Madison County -- ILR000128249

PERIOD: From 01/12/2006 thru 10/12/2006 - Inclusive

SAMPLE TYPE: Water

CONSTITUENT	SITE	MP-85B	MP-85D	MP-89C	MP-89C	MP-89C
	SAMPLE ID	MP-85B/061010	MP-85D/061011	MP-89C/060116	MP-89C/060406	MP-89C/060711
	DATE	COMPARISON	10/10/2006	10/11/2006	01/16/2006	04/06/2006
RESULT TYPE	VALUE	Primary	Primary	Primary	Primary	Primary
Antimony	(mg/l)	0.006	<0.0050	<0.0050	0.0035J	<0.0050
Antimony (Dissolved)	(mg/l)	0.006	<0.0050	<0.0050	0.0022J	<0.0050
Arsenic	(mg/l)	0.05	0.124	<0.0030	0.0076	0.0140
Arsenic (Dissolved)	(mg/l)	0.05	0.126S	<0.0030	0.0068	0.0039
Barium	(mg/l)	2	0.562	0.386	0.636	1.19
Barium (Dissolved)	(mg/l)	2	0.396	0.351	0.439	0.537
Beryllium	(mg/l)	0.004	0.0006J	<0.0010	0.0004J	0.0016
Beryllium (Dissolved)	(mg/l)	0.004	<0.0010	<0.0010	0.0004J	0.0003J
Cadmium	(mg/l)	0.005	<0.0020	<0.0020	0.0053	0.0039
Cadmium (Dissolved)	(mg/l)	0.005	<0.0020	<0.0020	0.0012J	0.0016J
Chromium	(mg/l)	0.1	0.0205	<0.0100	0.0242	0.0672
Chromium (Dissolved)	(mg/l)	0.1	0.0062J	<0.0100	<0.0100	0.0056J
Cobalt	(mg/l)	1	0.0084J	<0.0100	0.0095J	0.0303
Cobalt (Dissolved)	(mg/l)	1	<0.0100	<0.0100	<0.0100	<0.0100
Iron	(mg/l)	5	56.8	16.7	44.3	105
Iron (Dissolved)	(mg/l)	5	37.2S	15.9	20.6	29.2
Lead	(mg/l)	0.0075	0.0171	<0.0020	0.0271	0.0623
Lead (Dissolved)	(mg/l)	0.0075	0.0010J	<0.0020	<0.0020	<0.0020
Mercury	(mg/l)	0.002	<0.00020	<0.00020	0.00007J	0.00012J
Mercury (Dissolved)	(mg/l)	0.002	<0.00020	<0.00020	<0.00020	<0.00020

See Notes at End of Table

Appendix E-2
 Last Four Quarters of Groundwater Analytical Results
 Metals (Total and Dissolved)
 1st through 4th Quarter 2006
 The Hartford Working Group / Hartford, Illinois
 1190505040 -- Madison County -- ILR000128249

PERIOD: From 01/12/2006 thru 10/12/2006 - Inclusive

SAMPLE TYPE: Water

CONSTITUENT	SITE	MP-85B	MP-85D	MP-89C	MP-89C	MP-89C
	SAMPLE ID	MP-85B/061010	MP-85D/061011	MP-89C/060116	MP-89C/060406	MP-89C/060711
	DATE	10/10/2006	10/11/2006	01/16/2006	04/06/2006	07/11/2006
	RESULT TYPE	Primary	Primary	Primary	Primary	Primary
Nickel	(mg/l)	0.1	0.0198	<0.0100	0.0288	0.0736
Nickel (Dissolved)	(mg/l)	0.1	<0.0100	<0.0100	<0.0100	0.0042J
Selenium	(mg/l)	0.05	<0.0060	<0.0060	<0.0060	0.0038J
Selenium (Dissolved)	(mg/l)	0.05	<0.0060	<0.0060	<0.0060	0.0060
Silver	(mg/l)	0.05	<0.0100	<0.0100	0.0066J	<0.0100
Silver (Dissolved)	(mg/l)	0.05	<0.0100	<0.0100	<0.0100	<0.0100
Vanadium	(mg/l)	0.049	0.0290	0.0098J	0.0092J	0.114
Vanadium (Dissolved)	(mg/l)	0.049	0.0097J	<0.0100	<0.0100	0.0035J
Zinc	(mg/l)	5	0.0531	0.0106	0.155	0.273
Zinc (Dissolved)	(mg/l)	5	<0.0100	<0.0100	0.0564	0.0048J

See Notes at End of Table

Appendix E-2
 Last Four Quarters of Groundwater Analytical Results
 Metals (Total and Dissolved)
 1st through 4th Quarter 2006
 The Hartford Working Group / Hartford, Illinois
 1190505040 -- Madison County -- ILR000128249

PERIOD: From 01/12/2006 thru 10/12/2006 - Inclusive

SAMPLE TYPE: Water

CONSTITUENT	SITE	COMPARISON	MP-89C	MP-92D	MP-92D	MP-92D	MP-92D
	SAMPLE ID		MP-89C/061011	MP-92D/060407	MP-92D/060711	DUP-002/060711	MP-92D/061011
	DATE		10/11/2006	04/07/2006	07/11/2006	07/11/2006	10/11/2006
RESULT TYPE	VALUE		Primary	Primary	Primary	Duplicate 1	Primary
Antimony	(mg/l)	0.006	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Antimony (Dissolved)	(mg/l)	0.006	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Arsenic	(mg/l)	0.05	0.0150	0.0036	0.0048	0.0028J	0.0050
Arsenic (Dissolved)	(mg/l)	0.05	0.0141	0.0028J	0.0048	0.0030	0.0031
Barium	(mg/l)	2	0.198	0.204	0.171	0.164	0.173
Barium (Dissolved)	(mg/l)	2	0.159	0.166	0.144	0.145	0.126
Beryllium	(mg/l)	0.004	<0.0010	0.0003J	<0.0010	<0.0010	<0.0010
Beryllium (Dissolved)	(mg/l)	0.004	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Cadmium	(mg/l)	0.005	<0.0020	0.0004J	0.0011J	0.0006J	<0.0020
Cadmium (Dissolved)	(mg/l)	0.005	<0.0020	<0.0020	0.0006J	0.0003J	<0.0020
Chromium	(mg/l)	0.1	<0.0100	0.0066J	0.0044J	<0.0100	<0.0100
Chromium (Dissolved)	(mg/l)	0.1	0.0065J	<0.0100	<0.0100	<0.0100	<0.0100
Cobalt	(mg/l)	1	<0.0100	<0.0100	0.0043J	0.0054J	<0.0100
Cobalt (Dissolved)	(mg/l)	1	<0.0100	<0.0100	0.0052J	0.0068J	<0.0100
Iron	(mg/l)	5	30.3	8.65	6.68	6.35	9.78
Iron (Dissolved)	(mg/l)	5	28.8	6.70	5.53	5.55S	6.80
Lead	(mg/l)	0.0075	0.0007J	0.0024	0.0008J	0.0009J	0.0031
Lead (Dissolved)	(mg/l)	0.0075	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
Mercury	(mg/l)	0.002	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020
Mercury (Dissolved)	(mg/l)	0.002	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020
Nickel	(mg/l)	0.1	<0.0100	0.0077J	0.0096J	0.0081J	0.0033J

See Notes at End of Table

Appendix E-2
 Last Four Quarters of Groundwater Analytical Results
 Metals (Total and Dissolved)
 1st through 4th Quarter 2006
 The Hartford Working Group / Hartford, Illinois
 1190505040 -- Madison County -- ILR000128249

PERIOD: From 01/12/2006 thru 10/12/2006 - Inclusive

SAMPLE TYPE: Water

CONSTITUENT	SITE	COMPARISON	MP-89C	MP-92D	MP-92D	MP-92D	MP-92D
	SAMPLE ID		MP-89C/061011	MP-92D/060407	MP-92D/060711	DUP-002/060711	MP-92D/061011
	DATE		10/11/2006	04/07/2006	07/11/2006	07/11/2006	10/11/2006
	RESULT TYPE	VALUE	Primary	Primary	Primary	Duplicate 1	Primary
Nickel (Dissolved)	(mg/l)	0.1	<0.0100	0.0034J	0.0061J	0.0062J	<0.0100
Selenium	(mg/l)	0.05	<0.0060	<0.0060	<0.0060	<0.0060	<0.0060
Selenium (Dissolved)	(mg/l)	0.05	<0.0060	<0.0060	<0.0060	<0.0060	<0.0060
Silver	(mg/l)	0.05	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100
Silver (Dissolved)	(mg/l)	0.05	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100
Vanadium	(mg/l)	0.049	0.0080J	0.0055J	<0.0100	<0.0100	<0.0100
Vanadium (Dissolved)	(mg/l)	0.049	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100
Zinc	(mg/l)	5	0.0193	0.0779	0.0155	0.0079J	0.0084J
Zinc (Dissolved)	(mg/l)	5	<0.0100	0.0033J	0.0028J	0.0038J	<0.0100

See Notes at End of Table



NOTES

TABLES E-1, E-2 and E-3

Data prior to 2006 is provided in the Quarterly Groundwater Monitoring Report April 2006 dated August 8, 2006.

Comparison values are Tier 1 Class 1 Groundwater Remediation Objectives from Illinois EPA's Tiered Approach to Corrective Action Objectives (35 IAC Part 742). Groundwater quality values listed in 35 IAC Part 742 used for comparison purposes only.

mg/L = Milligrams per liter.

µg/L = Micrograms per liter.

J = Estimated value. Compound detected below the practical quantitation limit (PQL).

R = RPD outside accepted recovery limits.

S = Spike Recovery outside of accepted recovery limits.

NA = Constituent not analyzed by laboratory.



**BUREAU
VERITAS**

APPENDIX E-3

GENERAL CHEMISTRY AND NATURAL ATTENUATION PARAMETERS

Appendix E-3

Last Four Quarters of Groundwater Analytical Results

General Chemistry and Natural Attenuation Parameters

1st through 4th Quarter 2006

The Hartford Working Group / Hartford, Illinois

1190505040 -- Madison County -- ILR000128249

PERIOD: From 01/12/2006 thru 10/12/2006 - Inclusive

SAMPLE TYPE: Water

CONSTITUENT	SITE	HMW-25	HMW-25	HMW-25	HMW-25	HMW-26
	SAMPLE ID	HMW-25/060113	HMW-25/060407	HMW-25/060710	HMW-25/061011	HMW-26/060112
	DATE	COMPARISON	01/13/2006	04/07/2006	07/10/2006	10/11/2006
	RESULT TYPE	VALUE	Primary	Primary	Primary	Primary
Alkalinity (as CaCO ₃)	(mg/l)	476	460	472	452	572
Ammonia (as N)	(mg/l)	0.04J	<0.10	<0.010S	<0.10	<0.30
Carbon	(mg/l)	2.3	1.5	1.9	1.9	2.2
Chloride	(mg/l)	200	50	62	98	85
COD	(mg/l)	10J	<20	9J	<20	25
Cyanide	(mg/l)	0.2	<0.007	<0.050	<0.007	<0.007
Hardness (as CaCO ₃)	(mg/l)	410	420	530	500	780
Nitrate	(mg/l)	10	0.017	0.010J	0.118	0.298
NitrateplusNitrite (as N)	(mg/l)	0.017	0.010J	0.118	0.303	0.026
Nitrite (as N)	(mg/l)	<0.010	<0.010	<0.010	<0.010	0.010
Phosphorus	(mg/l)	0.016J	0.023S	<0.020	0.019J	0.307
Phosphorus (Dissolved)	(mg/l)	0.013J	<0.020	<0.020	<0.020	0.310
Residue, filterable	(mg/l)	604	658	684	608	1040
Residue non-filterable	(mg/l)	8	9	<6	<6	21
Sulfate	(mg/l)	400	<40	<40	50	50
Sulfide	(mg/l)	<0.05	<0.05	<0.05	<0.05	<0.05

See Notes at End of Table

Appendix E-3

Last Four Quarters of Groundwater Analytical Results
 General Chemistry and Natural Attenuation Parameters
 1st through 4th Quarter 2006
 The Hartford Working Group / Hartford, Illinois
 1190505040 -- Madison County -- ILR000128249

PERIOD: From 01/12/2006 thru 10/12/2006 - Inclusive

SAMPLE TYPE: Water

CONSTITUENT	SITE	COMPARISON	HMW-26	HMW-26	HMW-26	HMW-26	HMW-26
	SAMPLE ID		HMW-26/060407	HMW-26/060710	HMW-26/060711	HMW-26/061011	DUP-001/061011
	DATE	04/07/2006	07/10/2006	07/11/2006	10/11/2006	10/11/2006	
	RESULT TYPE	Primary	Primary	Primary	Primary	Primary	Duplicate 1
Alkalinity (as CaCO ₃)	(mg/l)	604	586	NA	598	600	
Ammonia (as N)	(mg/l)	0.29	NA	0.21	0.28	0.27S	
Carbon	(mg/l)	2.5	2.8	NA	3.1	3.0	
Chloride	(mg/l)	200	109S	84	120	125	
COD	(mg/l)	<20	NA	24	<20	<20	
Cyanide	(mg/l)	0.2	<0.050	<0.007	NA	<0.007	<0.007
Hardness (as CaCO ₃)	(mg/l)	840	740	NA	780	760	
Nitrate	(mg/l)	10	0.073	NA	0.012J	<0.050	<0.050
NitrateplusNitrite (as N)	(mg/l)	0.073	NA	0.012J	<0.050	<0.050	
Nitrite (as N)	(mg/l)	<0.010	<0.010	NA	<0.010	<0.010	
Phosphorus	(mg/l)	0.342	NA	0.367	0.384	0.392	
Phosphorus (Dissolved)	(mg/l)	0.325	0.345	NA	0.347	0.381	
Residue, filterable	(mg/l)	1030	954	NA	1030	1060	
Residue, non-filterable	(mg/l)	79	38	NA	46	36	
Sulfate	(mg/l)	400	135	148	NA	207	205
Sulfide	(mg/l)	0.02J	<0.05	NA	0.05J	0.02J	

See Notes at End of Table

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Last Four Quarters of Groundwater Analytical Results
 General Chemistry and Natural Attenuation Parameters
 1st through 4th Quarter 2006
 The Hartford Working Group / Hartford, Illinois
 1190505040 -- Madison County -- ILR000128249

PERIOD: From 01/12/2006 thru 10/12/2006 - Inclusive

SAMPLE TYPE: Water

CONSTITUENT	SITE	HMW-27	HMW-27	HMW-27	HMW-27	HMW-28
	SAMPLE ID	HMW-27/060112	HMW-27/060406	HMW-27/060710	HMW-27/061012	HMW-28/060113
	DATE	COMPARISON	01/12/2006	04/06/2006	07/10/2006	10/12/2006
	RESULT TYPE	VALUE	Primary	Primary	Primary	Primary
Alkalinity (as CaCO ₃)	(mg/l)	642	640	614	592	552
Ammonia (as N)	(mg/l)	0.04J	<0.10	<0.10	<0.10	<0.10
Carbon	(mg/l)	4.4	2.8	4.4	3.8	4.5
Chloride	(mg/l)	200	40	20S	48	44
COD	(mg/l)	14J	<20	48	<20	23
Cyanide	(mg/l)	0.2	0.006J	<0.050	<0.007	<0.007
Hardness (as CaCO ₃)	(mg/l)	870	760	870	870	630
Nitrate	(mg/l)	10	0.011	<0.050	0.069	0.012J
NitrateplusNitrite (as N)	(mg/l)	0.011	<0.050	0.069	0.019J	0.081
Nitrite (as N)	(mg/l)	<0.010	<0.010	<0.010	<0.010	<0.010
Phosphorus	(mg/l)	0.018J	0.033	0.036	<0.020B	0.016J
Phosphorus (Dissolved)	(mg/l)	0.016J	0.013J	<0.020	<0.020	0.016J
Residue, filterable	(mg/l)	1020	912	1070	1090	708
Residue, non-filterable	(mg/l)	<6	<6	<6	<6	<6
Sulfate	(mg/l)	400	199	178S	282	239
Sulfide	(mg/l)	<0.05	<0.05	<0.05	<0.05	<0.05

See Notes at End of Table

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Last Four Quarters of Groundwater Analytical Results
 General Chemistry and Natural Attenuation Parameters
 1st through 4th Quarter 2006
 The Hartford Working Group / Hartford, Illinois
 1190505040 -- Madison County -- ILR000128249

PERIOD: From 01/12/2006 thru 10/12/2006 - Inclusive

SAMPLE TYPE: Water

CONSTITUENT	SITE	HMW-28	HMW-28	HMW-28	HMW-28	HMW-29
	SAMPLE ID	HMW-28/060406	HMW-28/060710	Dup-001/060710	HMW-28/061012	HMW-29/060113
	DATE	COMPARISON	04/06/2006	07/10/2006	07/10/2006	10/12/2006
	RESULT TYPE	VALUE	Primary	Primary	Duplicate 1	Primary
Alkalinity (as CaCO ₃)	(mg/l)	544	558	544	550	512
Ammonia (as N)	(mg/l)	<0.10	<0.10	<0.10	0.13	0.11
Carbon	(mg/l)	3.6	4.1	4.1	4.0	1.6
Chloride	(mg/l)	200	33	24	24	31
COD	(mg/l)	<20	14J	19J	<20	<20
Cyanide	(mg/l)	0.2	<0.050	<0.007	<0.007	<0.007
Hardness (as CaCO ₃)	(mg/l)	570	660	600	630	580
Nitrate	(mg/l)	10	0.306	1.24	1.32	1.43
NitrateplusNitrite (as N)	(mg/l)	0.324	1.32	1.42	1.52	0.017
Nitrite (as N)	(mg/l)	0.018	0.083	0.101	0.093	<0.010
Phosphorus	(mg/l)	0.015J	<0.020	<0.020	<0.020	0.088
Phosphorus (Dissolved)	(mg/l)	0.013J	0.013J	<0.020	<0.022	0.080
Residue, filterable	(mg/l)	714	696	706	718	728
Residue, non-filterable	(mg/l)	<6	<6	<6	<6	8
Sulfate	(mg/l)	400	63	69	64	71
Sulfide	(mg/l)	<0.05	<0.05	<0.05	<0.05	<0.05

See Notes at End of Table

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Last Four Quarters of Groundwater Analytical Results
 General Chemistry and Natural Attenuation Parameters

1st through 4th Quarter 2006

The Hartford Working Group / Hartford, Illinois

1190505040 -- Madison County -- ILR000128249

PERIOD: From 01/12/2006 thru 10/12/2006 - Inclusive

SAMPLE TYPE: Water

CONSTITUENT	SITE	HMW-29	HMW-29	HMW-29	HMW-29	HMW-29
	SAMPLE ID	DUP001/060113	HMW-29/060406	DUP-001/060406	HMW-29/060710	HMW-29/061012
	DATE	01/13/2006	04/06/2006	04/06/2006	07/10/2006	10/12/2006
	RESULT TYPE	Duplicate 1	Primary	Duplicate 1	Primary	Primary
Alkalinity (as CaCO ₃)	(mg/l)	514	492	478	500	460
Ammonia (as N)	(mg/l)	0.12	0.07J	0.08J	0.09J	0.08J
Carbon	(mg/l)	1.4	0.9J	1.2	1.6	1.6
Chloride	(mg/l)	200	29	17	17	17
COD	(mg/l)	<20	<20	<20	12J	<20
Cyanide	(mg/l)	0.2	<0.007	<0.050	<0.050	<0.007
Hardness (as CaCO ₃)	(mg/l)	610	540	510	460	620
Nitrate	(mg/l)	10	0.044	<0.050	<0.050	<0.050
NitrateplusNitrite (as N)	(mg/l)	0.044	<0.050	<0.050	<0.050	0.056S
Nitrite (as N)	(mg/l)	<0.010	<0.010	<0.010	<0.010	<0.010
Phosphorus	(mg/l)	0.092	0.110	0.103	0.173	0.116
Phosphorus (Dissolved)	(mg/l)	0.077	0.084	0.079	0.061	0.089
Residue, filterable	(mg/l)	706	636	648	588	616
Residue, non-filterable	(mg/l)	8	20	16	48	20
Sulfate	(mg/l)	400	122	72	74	47
Sulfide	(mg/l)	<0.05	0.03J	<0.05	<0.05	<0.05

See Notes at End of Table

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Last Four Quarters of Groundwater Analytical Results
 General Chemistry and Natural Attenuation Parameters
 1st through 4th Quarter 2006
 The Hartford Working Group / Hartford, Illinois
 1190505040 -- Madison County -- ILR000128249

PERIOD: From 01/12/2006 thru 10/12/2006 - Inclusive

SAMPLE TYPE: Water

CONSTITUENT	SITE	SAMPLE ID	HMW-38C	HMW-39B	HMW-39B	HMW-39B	HMW-39B
	DATE		HMW-38C/061010	HMW-39B/060112	HMW-39B/060406	HMW-39B/060710	HMW-39B/061010
	RESULT TYPE	VALUE	10/10/2006	01/12/2006	04/06/2006	07/10/2006	10/10/2006
Alkalinity (as CaCO ₃)	(mg/l)		684	324	307	263	255
Ammonia (as N)	(mg/l)		0.15	<0.10	<0.10	0.16	<0.10
Carbon	(mg/l)		12.1	2.0	1.5	2.1	2.2
Chloride	(mg/l)	200	55	156	207	249	201
COD	(mg/l)		60	20	<20	74	10J
Cyanide	(mg/l)	0.2	<0.007	<0.007	<0.050	<0.007	<0.007
Hardness (as CaCO ₃)	(mg/l)		750	250	280	310	230
Nitrate	(mg/l)	10	0.023J	0.084	0.448	0.101	0.055
NitrateplusNitrite (as N)	(mg/l)		0.023J	0.095	0.448	0.101	0.055
Nitrite (as N)	(mg/l)		<0.010	0.011	<0.010	<0.010	<0.010
Phosphorus	(mg/l)		0.568	0.022	<0.020	1.78	0.134
Phosphorus (Dissolved)	(mg/l)		0.525	0.011J	<0.020	0.011J	0.019J
Residue, filterable	(mg/l)		816	606	700	628	574
Residue, non-filterable	(mg/l)		43	7	<6	3280	301
Sulfate	(mg/l)	400	<40	<40	<40	<40	<40
Sulfide	(mg/l)		0.18	<0.05	<0.05	0.47S	0.09S

See Notes at End of Table

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Last Four Quarters of Groundwater Analytical Results
 General Chemistry and Natural Attenuation Parameters
 1st through 4th Quarter 2006
 The Hartford Working Group / Hartford, Illinois
 1190505040 -- Madison County -- ILR000128249

PERIOD: From 01/12/2006 thru 10/12/2006 - Inclusive

SAMPLE TYPE: Water

CONSTITUENT	SITE	HMW-39C	HMW-39C	HMW-39C	HMW-39C	HMW-40C
	SAMPLE ID	HMW-39C/060113	HMW-39C/060406	HMW-39C/060711	HMW-39C/061011	HMW-40C/060113
	DATE	COMPARISON	01/13/2006	04/06/2006	07/11/2006	10/11/2006
	RESULT TYPE	VALUE	Primary	Primary	Primary	Primary
Alkalinity (as CaCO ₃)	(mg/l)		249	248	258	258
Ammonia (as N)	(mg/l)		0.36	0.32	0.27	0.28
Carbon	(mg/l)		1.4	1.7	1.9	1.7
Chloride	(mg/l)	200	269	185	173	205
COD	(mg/l)		28	8J	19J	<20
Cyanide	(mg/l)	0.2	<0.007	<0.050	<0.007	<0.007
Hardness (as CaCO ₃)	(mg/l)		260	240	290	280
Nitrate	(mg/l)	10	0.256	<0.050	0.036J	<0.050
NitrateplusNitrite (as N)	(mg/l)		0.256	<0.050	0.036J	<0.050
Nitrite (as N)	(mg/l)		<0.010	<0.010	<0.010	<0.010
Phosphorus	(mg/l)		0.394	0.353	0.332	0.352
Phosphorus (Dissolved)	(mg/l)		0.291	0.243	0.286	0.312
Residue, filterable	(mg/l)		754	614	590	614
Résidue non-filterable	(mg/l)		39	24	6	18
Sulfate	(mg/l)	400	<40	<40	<40	<40
Sulfide	(mg/l)		0.03JS	0.02J	<0.05	0.02J

See Notes at End of Table

Appendix E-3

Last Four Quarters of Groundwater Analytical Results

General Chemistry and Natural Attenuation Parameters

1st through 4th Quarter 2006

The Hartford Working Group / Hartford, Illinois

1190505040 -- Madison County -- ILR000128249

PERIOD: From 01/12/2006 thru 10/12/2006 - Inclusive

SAMPLE TYPE: Water

CONSTITUENT	SITE	COMPARISON	HMW-40C	HMW-40C	HMW-40C	HMW-40C	HMW-40C
	SAMPLE ID		DUP-002/060113	HMW-40C/060406	HMW-40C/060711	HMW-40C/061010	DUP-002/061010
	DATE		01/13/2006	04/06/2006	07/11/2006	10/10/2006	10/10/2006
	RESULT TYPE	VALUE	Duplicate 1	Primary	Primary	Primary	Duplicate 1
Alkalinity (as CaCO ₃)	(mg/l)		416	446	400	408	424
Ammonia (as N)	(mg/l)		0.07J	0.11	<0.10	0.17	0.09J
Carbon	(mg/l)		2.7	2.7	2.7	4.6	3.1
Chloride	(mg/l)	200	14	27	18	25	24
COD	(mg/l)		15J	<20	9J	10J	8J
Cyanide	(mg/l)	0.2	<0.007	0.004J	<0.007	<0.007	<0.007
Hardness (as CaCO ₃)	(mg/l)		430	480	430	430	460
Nitrate	(mg/l)	10	0.096	<0.050	0.156	0.022J	0.015J
NitrateplusNitrite (as N)	(mg/l)		0.115	<0.050	0.195	0.027J	0.020J
Nitrite (as N)	(mg/l)		0.019	<0.010	0.039	<0.010	<0.010
Phosphorus	(mg/l)		0.082	0.133	0.085	0.522	0.180
Phosphorus (Dissolved)	(mg/l)		0.014J	0.023	<0.020	0.011J	0.015J
Residue, filterable	(mg/l)		486	572	454	510	504
Residue, non-filterable	(mg/l)		44	82	39	199	82
Sulfate	(mg/l)	400	<40	<40	<40	<40	<40
Sulfide	(mg/l)		<0.05	0.07	<0.05	0.05J	<0.05

See Notes at End of Table

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Last Four Quarters of Groundwater Analytical Results
 General Chemistry and Natural Attenuation Parameters

1st through 4th Quarter 2006

The Hartford Working Group / Hartford, Illinois
 1190505040 -- Madison County -- ILR000128249

PERIOD: From 01/12/2006 thru 10/12/2006 - Inclusive

SAMPLE TYPE: Water

CONSTITUENT	SITE	HMW-43C	HMW-43C	HMW-44D	HMW-47B	HMW-48C
	SAMPLE ID	HMW-43C/061010	DUP-001/061010	HMW-44D/061011	HMW-47B/061010	HMW-48C/060623
	DATE	COMPARISON	10/10/2006	10/10/2006	10/11/2006	10/10/2006
	RESULT TYPE	VALUE	Primary	Duplicate 1	Primary	Primary
Alkalinity (as CaCO ₃)	(mg/l)	492	490	664	NA	608
Ammonia (as N)	(mg/l)	0.26	0.25	0.18	NA	1.15
Carbon	(mg/l)	2.4	2.4	6.3	6.0	NA
Chloride	(mg/l)	200	47	47	32	NA
COD	(mg/l)	<20	8J	18J	NA	840
Cyanide	(mg/l)	0.2	<0.007	<0.007	<0.007	<0.007
Hardness (as CaCO ₃)	(mg/l)	650	650	610	NA	530
Nitrate	(mg/l)	10	0.016J	0.021J	<0.050	NA
NitrateplusNitrite (as N)	(mg/l)	0.016J	0.021J	<0.050	NA	NA
Nitrite (as N)	(mg/l)	<0.010	<0.010	<0.010	NA	NA
Phosphorus	(mg/l)	0.145	0.101	0.244S	NA	NA
Phosphorus (Dissolved)	(mg/l)	0.139	0.091	0.215SR	0.290	NA
Residue, filterable	(mg/l)	808	812	718	NA	668
Residue, non-filterable	(mg/l)	13	18	33	NA	140
Sulfate	(mg/l)	400	149	150	<40	<40
Sulfide	(mg/l)	0.03J	0.03J	0.03J	NA	0.26S

See Notes at End of Table

Appendix E-3

Last Four Quarters of Groundwater Analytical Results

General Chemistry and Natural Attenuation Parameters

1st through 4th Quarter 2006

The Hartford Working Group / Hartford, Illinois

1190505040 -- Madison County -- ILR000128249

PERIOD: From 01/12/2006 thru 10/12/2006 - Inclusive

SAMPLE TYPE: Water

CONSTITUENT	SITE	COMPARISON	HMW-48D	HMW-49B	HMW-49C	HMW-49C	HMW-49C
	SAMPLE ID		HMW-48D/061010	HMW-49B/060406	HMW-49C/060113	HMW-49C/060406	HMW-49C/060710
	DATE	RESULT TYPE	10/10/2006	04/06/2006	01/13/2006	04/06/2006	07/10/2006
		VALUE	Primary	Primary	Primary	Primary	Primary
Alkalinity (as CaCO ₃)	(mg/l)		462	772	498	502	482
Ammonia (as N)	(mg/l)		0.20	0.13	0.13	0.19	0.06JS
Carbon	(mg/l)		3.8	4.4	7.5	6.6	7.6S
Chloride	(mg/l)	200	114	350	26	7	14
COD	(mg/l)		40	65	152	93	55
Cyanide	(mg/l)	0.2	<0.007	<0.050	<0.007	<0.050	<0.007
Hardness (as CaCO ₃)	(mg/l)		500	1180	480	440	470
Nitrate	(mg/l)	10	0.012J	<0.050	0.023	0.010JS	<0.050
NitrateplusNitrite (as N)	(mg/l)		0.012J	<0.050	0.023	0.010JS	<0.050
Nitrite (as N)	(mg/l)		<0.010	<0.010	<0.010	<0.010	<0.010
Phosphorus	(mg/l)		0.656	0.596	0.917	0.483	0.918
Phosphorus (Dissolved)	(mg/l)		0.583	0.424	0.820	0.451	0.837
Residue, filterable	(mg/l)		700	1650	548	542	524
Residue, non-filterable	(mg/l)		66	116	375	429	55
Sulfate	(mg/l)	400	<40	<40	<40	<40	<40
Sulfide	(mg/l)		0.06S	0.06S	0.02JS	0.16S	0.04JS

See Notes at End of Table

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Last Four Quarters of Groundwater Analytical Results

General Chemistry and Natural Attenuation Parameters

1st through 4th Quarter 2006

The Hartford Working Group / Hartford, Illinois

1190505040 -- Madison County -- ILR000128249

PERIOD: From 01/12/2006 thru 10/12/2006 - Inclusive

SAMPLE TYPE: Water

CONSTITUENT	SITE	HMW-49C	HMW-49D	HMW-49D	HMW-49D	HMW-49D
	SAMPLE ID	HMW-49C/061011	HMW-49D/060113	HMW-49D/060406	DUP-001/060406	HMW-49D/060710
	DATE	COMPARISON	10/11/2006	01/13/2006	04/06/2006	04/06/2006
	RESULT TYPE	VALUE	Primary	Primary	Primary	Duplicate 1
Alkalinity (as CaCO ₃)	(mg/l)	506	534	510	526	528
Ammonia (as N)	(mg/l)	<0.10	0.24S	0.22	0.20S	0.18
Carbon	(mg/l)	9.4	5.3	6.0	5.9	5.0
Chloride	(mg/l)	200	83	33	40	37
COD	(mg/l)	72	52	28	41	41
Cyanide	(mg/l)	0.2	<0.007	<0.007	<0.050	<0.050
Hardness (as CaCO ₃)	(mg/l)	470	490	460	490	500
Nitrate	(mg/l)	10	0.010J	0.171	0.017J	<0.050
NitrateplusNitrite (as N)	(mg/l)		0.010J	0.182	0.017J	0.015J
Nitrite (as N)	(mg/l)	<0.010	0.011	<0.010	0.010	0.033
Phosphorus	(mg/l)	0.552	0.552	0.606	0.617	0.672
Phosphorus (Dissolved)	(mg/l)	0.366	0.516	0.449	0.480	0.663
Residue, filterable	(mg/l)	526	584	616	622	594
Residue, non-filterable	(mg/l)	77	40	69	65	103
Sulfate	(mg/l)	400	<40	<40	<40	<40
Sulfide	(mg/l)		0.11S	0.02J	0.03J	0.03J

See Notes at End of Table

Appendix E-3
Last Four Quarters of Groundwater Analytical Results
General Chemistry and Natural Attenuation Parameters
1st through 4th Quarter 2006
The Hartford Working Group / Hartford, Illinois
1190505040 -- Madison County -- ILR000128249

PERIOD: From 01/12/2006 thru 10/12/2006 - Inclusive

SAMPLE TYPE: Water

CONSTITUENT	SITE SAMPLE ID	DATE	COMPARISON RESULT TYPE	HMW-49D	HMW-49D	HMW-49D	HMW-50A	HMW-50A
				Dup-001/060710	HMW-49D/061010	DUP-003/061010	HMW-50A/060112	DUP-001/060112
Alkalinity (as CaCO ₃)	(mg/l)			520	530	412	436	466
Ammonia (as N)	(mg/l)			0.19	0.20	0.21	0.05J	<0.10
Carbon	(mg/l)			5.0	4.4	4.4	2.3	2.4
Chloride	(mg/l)	200		37	47	50	42	29
COD	(mg/l)			45	18J	20	14J	14J
Cyanide	(mg/l)	0.2		<0.007	<0.007	<0.007	<0.007	<0.007
Hardness (as CaCO ₃)	(mg/l)			540	500	520	820	830
Nitrate	(mg/l)	10		0.323	0.079	0.336	1.60	1.31
NitrateplusNitrite (as N)	(mg/l)			0.363	0.079	0.336	1.60	1.32
Nitrite (as N)	(mg/l)			0.040	<0.010	<0.010	<0.010	0.010
Phosphorus	(mg/l)			0.685	0.551	0.726	0.264	0.256
Phosphorus (Dissolved)	(mg/l)			0.628	0.432	0.381	0.179S	0.192
Residue, filterable	(mg/l)			600	624	628	1110	1140
Residue, non-filterable	(mg/l)			116	64	57	149	31
Sulfate	(mg/l)	400		<40	<40	<40	424	416
Sulfide	(mg/l)			0.03JS	0.05	0.05J	0.07S	<0.05

See Notes at End of Table

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Last Four Quarters of Groundwater Analytical Results
 General Chemistry and Natural Attenuation Parameters
 1st through 4th Quarter 2006
 The Hartford Working Group / Hartford, Illinois
 1190505040 – Madison County -- ILR000128249

PERIOD: From 01/12/2006 thru 10/12/2006 - Inclusive

SAMPLE TYPE: Water

CONSTITUENT	SITE	HMW-50A	HMW-50A	HMW-50A	HMW-50B	HMW-50B	
	SAMPLE ID	HMW-50A/060407	HMW-50A/060711	HMW-50A/061010	HMW-50B/060113	HMW-50B/060406	
	DATE	COMPARISON	04/07/2006	07/11/2006	10/10/2006	01/13/2006	04/06/2006
	RESULT TYPE	VALUE	Primary	Primary	Primary	Primary	Primary
Alkalinity (as CaCO3)	(mg/l)	478	500	498	269	241	
Ammonia (as N)	(mg/l)	<0.10	<0.10	<0.10	2.05	2.01	
Carbon	(mg/l)	2.7	2.5	2.6	1.4	1.7	
Chloride	(mg/l)	200	20S	23	26	476	286
COD	(mg/l)	<20	9J	<20	44	23	
Cyanide	(mg/l)	0.2	<0.050	<0.007	<0.007	<0.007	<0.050
Hardness (as CaCO3)	(mg/l)	830	940	920	960	770	
Nitrate	(mg/l)	10	1.23	0.871	0.750	0.011	<0.050
NitrateplusNitrite (as N)	(mg/l)		1.23	0.871	0.773	0.011	<0.050
Nitrite (as N)	(mg/l)		<0.010	<0.010	0.023	<0.010	<0.010
Phosphorus	(mg/l)		0.183	0.277	0.233	0.442	0.505
Phosphorus (Dissolved)	(mg/l)		0.149	0.219	0.118	0.386	0.330
Residue, filterable	(mg/l)	1150	1240	1260	1720	1300	
Residue, non-filterable	(mg/l)	9	57	13	45	28	
Sulfate	(mg/l)	400	306	475	513	388	395
Sulfide	(mg/l)		0.03JS	<0.05	0.03JS	0.06	0.03J

See Notes at End of Table

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Last Four Quarters of Groundwater Analytical Results
 General Chemistry and Natural Attenuation Parameters
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 The Hartford Working Group / Hartford, Illinois
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PERIOD: From 01/12/2006 thru 10/12/2006 - Inclusive

SAMPLE TYPE: Water

CONSTITUENT	SITE	HMW-50B	HMW-50B	HMW-50C	HMW-50C	HMW-50C
	SAMPLE ID	HMW-50B/060711	HMW-50B/061010	HMW-50C/060116	HMW-50C/060407	HMW-50C/060710
	DATE	COMPARISON	07/11/2006	10/10/2006	01/16/2006	04/07/2006
	RESULT TYPE	VALUE	Primary	Primary	Primary	Primary
Alkalinity (as CaCO ₃)	(mg/l)	271	220	538	422	560
Ammonia (as N)	(mg/l)	1.83	1.92	0.58	0.73	0.42
Carbon	(mg/l)	1.8	1.9	1.8	1.6	2.3
Chloride	(mg/l)	200	432	287	365S	806
COD	(mg/l)	26	35	31	60	55
Cyanide	(mg/l)	0.2	<0.007	<0.007	<0.007	<0.050
Hardness (as CaCO ₃)	(mg/l)	920	710	860	1110	910
Nitrate	(mg/l)	10	0.013J	0.010J	0.046	<0.050
NitrateplusNitrite (as N)	(mg/l)		0.013J	0.010J	0.056	0.013J
Nitrite (as N)	(mg/l)		<0.010	<0.010	0.010	<0.010
Phosphorus	(mg/l)	0.483	0.529	0.657	0.443	0.804
Phosphorus (Dissolved)	(mg/l)	0.285	0.347	0.625	0.441	0.762
Residue, filterable	(mg/l)	1650	1280	1420	2700	1700
Residue, non-filterable	(mg/l)	65	35	9	48	29
Sulfate	(mg/l)	400	398	360	117	268
Sulfide	(mg/l)	<0.05	0.08	0.5J	1.9	8.2

See Notes at End of Table

Appendix E-3

Last Four Quarters of Groundwater Analytical Results
 General Chemistry and Natural Attenuation Parameters
 1st through 4th Quarter 2006
 The Hartford Working Group / Hartford, Illinois
 1190505040 -- Madison County -- ILR000128249

PERIOD: From 01/12/2006 thru 10/12/2006 - Inclusive

SAMPLE TYPE: Water

CONSTITUENT	SITE	HMW-50C	HMW-52C	HMW-52C	HMW-52C	HMW-52C	
	SAMPLE ID	HMW-50C/061009	HMW-52C/060112	HMW-52C/060407	HMW-52C/060710	HMW-52C/061010	
	DATE	COMPARISON	10/09/2006	01/12/2006	04/07/2006	07/10/2006	10/10/2006
	RESULT TYPE	VALUE	Primary	Primary	Primary	Primary	Primary
Alkalinity (as CaCO3)	(mg/l)	592	568	574	586	464	
Ammonia (as N)	(mg/l)	0.41	0.21	0.18	0.18	0.19	
Carbon	(mg/l)	2.0S	2.0	3.3	2.7	2.3	
Chloride	(mg/l)	200	639S	35	29	34	36
COD	(mg/l)	62	36	37	50	<20	
Cyanide	(mg/l)	0.2	<0.007	0.146	0.242	0.404	0.389
Hardness (as CaCO3)	(mg/l)	1090	690	710	740	680	
Nitrate	(mg/l)	0.012J	0.030	<0.050	0.062	0.013J	
NitrateplusNitrite (as N)	(mg/l)	0.012J	0.030	<0.050	0.062	0.013J	
Nitrite (as N)	(mg/l)	<0.010	<0.010	<0.010	<0.010	<0.010	
Phosphorus	(mg/l)	0.845	0.268	0.455	0.614	0.326	
Phosphorus (Dissolved)	(mg/l)	0.868	0.174	0.227	0.195	0.174	
Residue, filterable	(mg/l)	1840	802	876	850	874	
Residue, non-filterable	(mg/l)	10	157	767	626	152	
Sulfate	(mg/l)	400	64	125	118	136	144
Sulfide	(mg/l)	20	0.12S	0.20S	0.25S	0.08S	

See Notes at End of Table

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Last Four Quarters of Groundwater Analytical Results
 General Chemistry and Natural Attenuation Parameters
 1st through 4th Quarter 2006
 The Hartford Working Group / Hartford, Illinois
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PERIOD: From 01/12/2006 thru 10/12/2006 - Inclusive

SAMPLE TYPE: Water

CONSTITUENT	SITE	HMW-53C	HMW-54C	MP-78D	MP-81C	MP-81C
	SAMPLE ID	HMW-53C/061011	HMW-54C/061012	MP-78D/061012	MP-81C/060113	MP-81C/060406
	DATE	10/11/2006	10/12/2006	10/12/2006	01/13/2006	04/06/2006
RESULT TYPE	VALUE	Primary	Primary	Primary	Primary	Primary
Alkalinity (as CaCO ₃)	(mg/l)	586	564	782	596	590
Ammonia (as N)	(mg/l)	0.20	0.19	0.08J	0.09J	0.19
Carbon	(mg/l)	5.0	3.3	14.9	2.3	2.0
Chloride	(mg/l)	200	32	26	33	47
COD	(mg/l)	23	8J	121	23	21
Cyanide	(mg/l)	0.2	<0.007	<0.007	<0.007	<0.050
Hardness (as CaCO ₃)	(mg/l)	670	570	750	750	690
Nitrate	(mg/l)	10	<0.050	<0.050S	<0.050	0.106
NitrateplusNitrite (as N)	(mg/l)		<0.050	<0.050S	<0.050	0.124
Nitrite (as N)	(mg/l)		<0.010	<0.010	<0.010	0.018
Phosphorus	(mg/l)	0.333	0.255	0.490	0.021	0.049
Phosphorus (Dissolved)	(mg/l)	0.309	0.274	0.501	<0.020	<0.020
Residue, filterable	(mg/l)	702	592	836	924	888
Residue, non-filterable	(mg/l)	47	32	49	7J	21
Sulfate	(mg/l)	400	54	<40	<40	144
Sulfide	(mg/l)	0.08	0.04J	0.13	0.02J	0.04J

See Notes at End of Table

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Last Four Quarters of Groundwater Analytical Results
 General Chemistry and Natural Attenuation Parameters

1st through 4th Quarter 2006

The Hartford Working Group / Hartford, Illinois
 1190505040 -- ILR000128249

PERIOD: From 01/12/2006 thru 10/12/2006 - Inclusive

SAMPLE TYPE: Water

CONSTITUENT	SITE	MP-81C	MP-81C	MP-83C	MP-85B	MP-85D
	SAMPLE ID	DUP-002/060406	MP-81C/061011	MP-83C/061012	MP-85B/061010	MP-85D/061011
	DATE	COMPARISON	04/06/2006	10/11/2006	10/12/2006	10/10/2006
	RESULT TYPE	VALUE	Duplicate 1	Primary	Primary	Primary
Alkalinity (as CaCO ₃)	(mg/l)	590	600	686	740	432
Ammonia (as N)	(mg/l)	0.15	0.18	0.15	0.12	0.40
Carbon	(mg/l)	1.6	1.8	28.2	7.5	4.6
Chloride	(mg/l)	200	45	34	65	31
COD	(mg/l)	8J	<20	148	50	30
Cyanide	(mg/l)	0.2	<0.050	<0.007	<0.007	<0.007
Hardness (as CaCO ₃)	(mg/l)	690	750	730	610	500
Nitrate	(mg/l)	10	0.989	0.012J	<0.050	<0.050
NitrateplusNitrite (as N)	(mg/l)		0.989	0.017J	<0.050	0.012J
Nitrite (as N)	(mg/l)		<0.010	<0.010	<0.010	<0.010
Phosphorus	(mg/l)	0.031	0.021	0.398S	1.46	0.656
Phosphorus (Dissolved)	(mg/l)	0.010J	<0.020	0.375	1.04	0.613
Residue, filterable	(mg/l)	894	838	870	818	582
Residue, non-filterable	(mg/l)	7	<6	55	385	40
Sulfate	(mg/l)	400	127	188S	<40	<40
Sulfide	(mg/l)	0.02J	<0.05	0.09	0.08S	0.02J

See Notes at End of Table

Appendix E-3
 Last Four Quarters of Groundwater Analytical Results
 General Chemistry and Natural Attenuation Parameters
 1st through 4th Quarter 2006
 The Hartford Working Group / Hartford, Illinois
 1190505040 -- Madison County -- ILR000128249

PERIOD: From 01/12/2006 thru 10/12/2006 - Inclusive

SAMPLE TYPE: Water

CONSTITUENT	SITE	MP-89C	MP-89C	MP-89C	MP-89C	MP-92D
	SAMPLE ID	MP-89C/060116	MP-89C/060406	MP-89C/060711	MP-89C/061011	MP-92D/060407
	DATE	COMPARISON	01/16/2006	04/06/2006	07/11/2006	10/11/2006
	RESULT TYPE	VALUE	Primary	Primary	Primary	Primary
Alkalinity (as CaCO ₃)	(mg/l)	318	310	319	376	646
Ammonia (as N)	(mg/l)	0.31	0.33	0.18	0.22	0.08JS
Carbon	(mg/l)	3.8	7.6	3.4	2.9	3.1
Chloride	(mg/l)	200	13	13	24	61
COD	(mg/l)	58	161	29	<20	18J
Cyanide	(mg/l)	0.2	<0.007	<0.050	<0.007	<0.050
Hardness (as CaCO ₃)	(mg/l)	510	820	820	740	810
Nitrate	(mg/l)	10	0.016	0.176	0.199	0.036J
NitrateplusNitrite (as N)	(mg/l)	0.029	0.176	0.312	0.036J	<0.050
Nitrite (as N)	(mg/l)	0.013	<0.010	0.113	<0.010	<0.010
Phosphorus	(mg/l)	1.82	2.89S	0.809	0.509	0.067SR
Phosphorus (Dissolved)	(mg/l)	0.982	1.04S	0.298	0.331	0.016JSR
Residue, filterable	(mg/l)	652	1020	1120	1030	1130
Residue, non-filterable	(mg/l)	316	1010	93	75	10
Sulfate	(mg/l)	400	231	496	553	449
Sulfide	(mg/l)	<0.05S	17S	<0.08S	<0.04J	0.04JS

See Notes at End of Table

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Last Four Quarters of Groundwater Analytical Results
 General Chemistry and Natural Attenuation Parameters
 1st through 4th Quarter 2006
 The Hartford Working Group / Hartford, Illinois
 1190505040 -- Madison County -- ILR000128249

PERIOD: From 01/12/2006 thru 10/12/2006 - Inclusive

SAMPLE TYPE: Water

CONSTITUENT	SITE	MP-92D	MP-92D	MP-92D	
	SAMPLE ID	MP-92D/060711	DUP-002/060711	MP-92D/061011	
	DATE	COMPARISON	07/11/2006	07/11/2006	10/11/2006
	RESULT TYPE	VALUE	Primary	Duplicate 1	Primary
Alkalinity (as CaCO ₃)	(mg/l)	630	628	622	
Ammonia (as N)	(mg/l)	0.06J	0.04J	0.06J	
Carbon	(mg/l)	3.1	2.9	2.4	
Chloride	(mg/l)	200	70	69	66
COD	(mg/l)	21	17J	8J	
Cyanide	(mg/l)	0.2	<0.007	<0.007	<0.007
Hardness (as CaCO ₃)	(mg/l)	860	860	790	
Nitrate	(mg/l)	10	<0.050	<0.050	0.010J
NitrateplusNitrite (as N)	(mg/l)	<0.050	<0.050	0.015J	
Nitrite (as N)	(mg/l)	<0.010	<0.010	<0.010	
Phosphorus	(mg/l)	0.061	0.069	0.061	
Phosphorus (Dissolved)	(mg/l)	0.019J	0.019J	0.016J	
Residue, filterable	(mg/l)	1070	1070	1040	
Residue, non-filterable	(mg/l)	46	27	<6	
Sulfate	(mg/l)	400	246	240	228
Sulfide	(mg/l)	0.03JS	<0.05	0.05S	

See Notes at End of Table



NOTES

TABLES E-1, E-2 and E-3

Data prior to 2006 is provided in the Quarterly Groundwater Monitoring Report April 2006 dated August 8, 2006.

Comparison values are Tier 1 Class 1 Groundwater Remediation Objectives from Illinois EPA's Tiered Approach to Corrective Action Objectives (35 IAC Part 742). Groundwater quality values listed in 35 IAC Part 742 used for comparison purposes only.

mg/L = Milligrams per liter.

µg/L = Micrograms per liter.

J = Estimated value. Compound detected below the practical quantitation limit (PQL).

R = RPD outside accepted recovery limits.

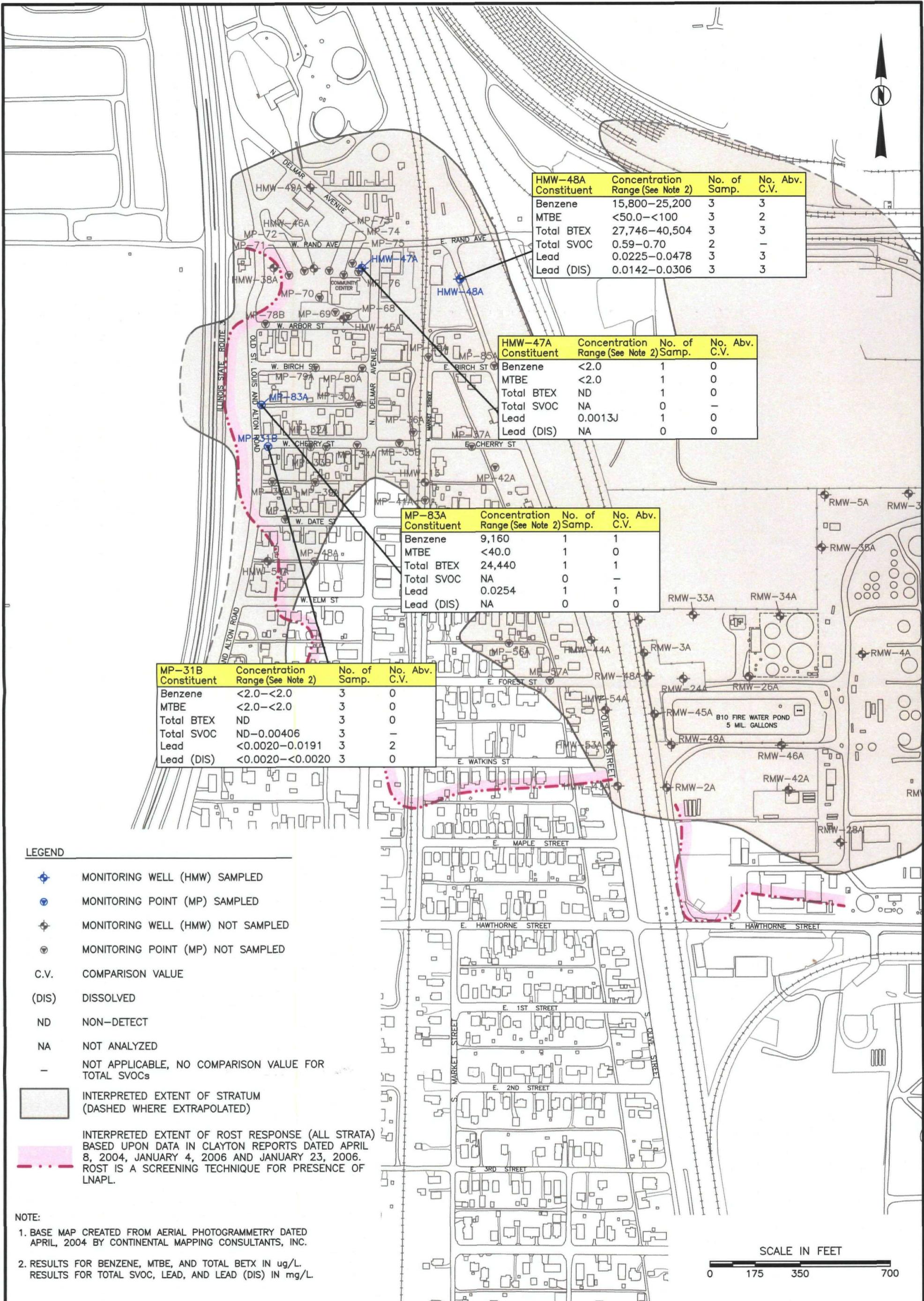
S = Spike Recovery outside of accepted recovery limits.

NA = Constituent not analyzed by laboratory.



APPENDIX F

HISTORIC SUMMARY FIGURES OF GROUNDWATER ANALYTICAL RESULTS, DECEMBER 2003 THROUGH JANUARY 2007



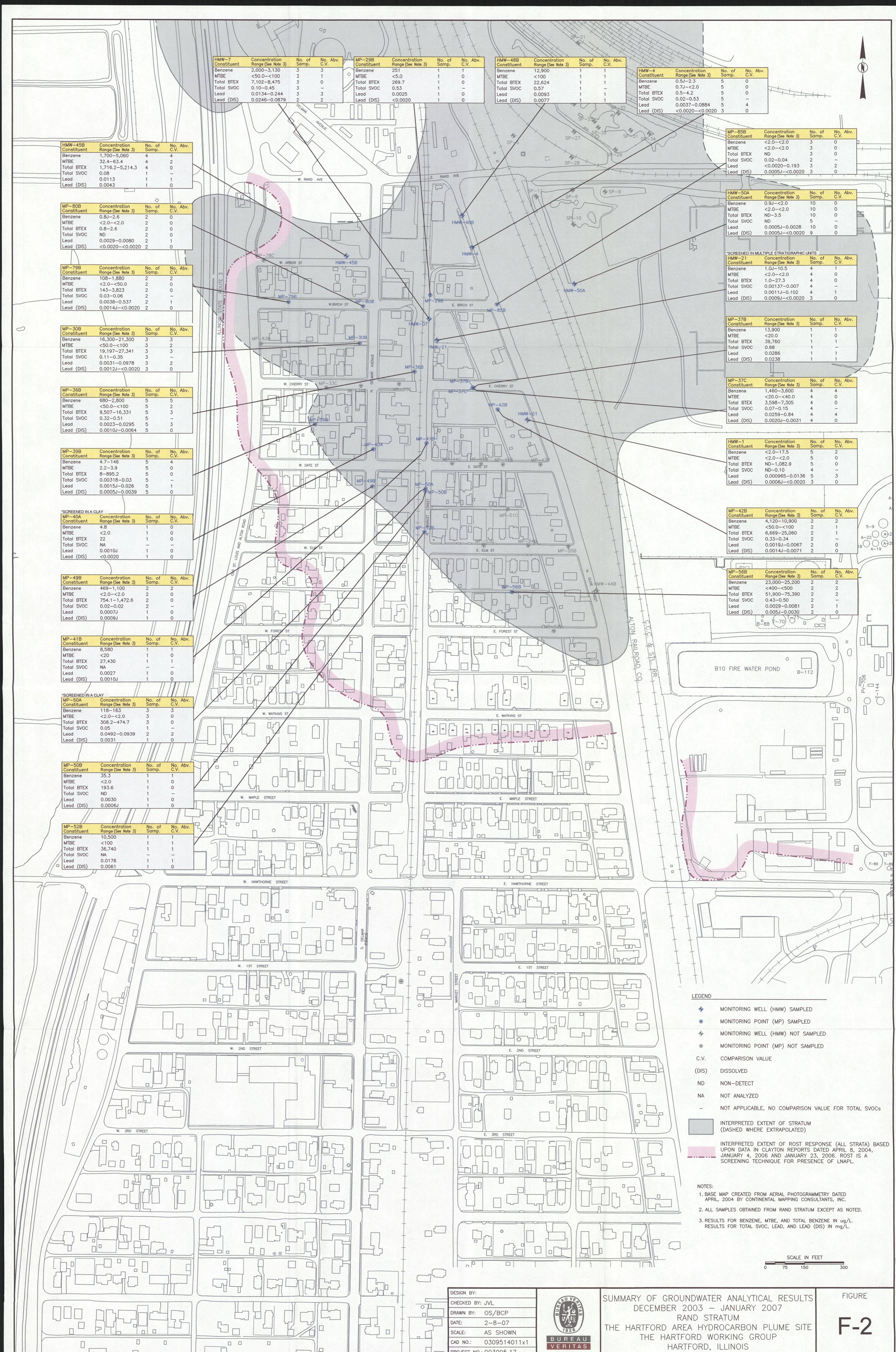
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DATE 2-8-07
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PRJ NO. 003095.17

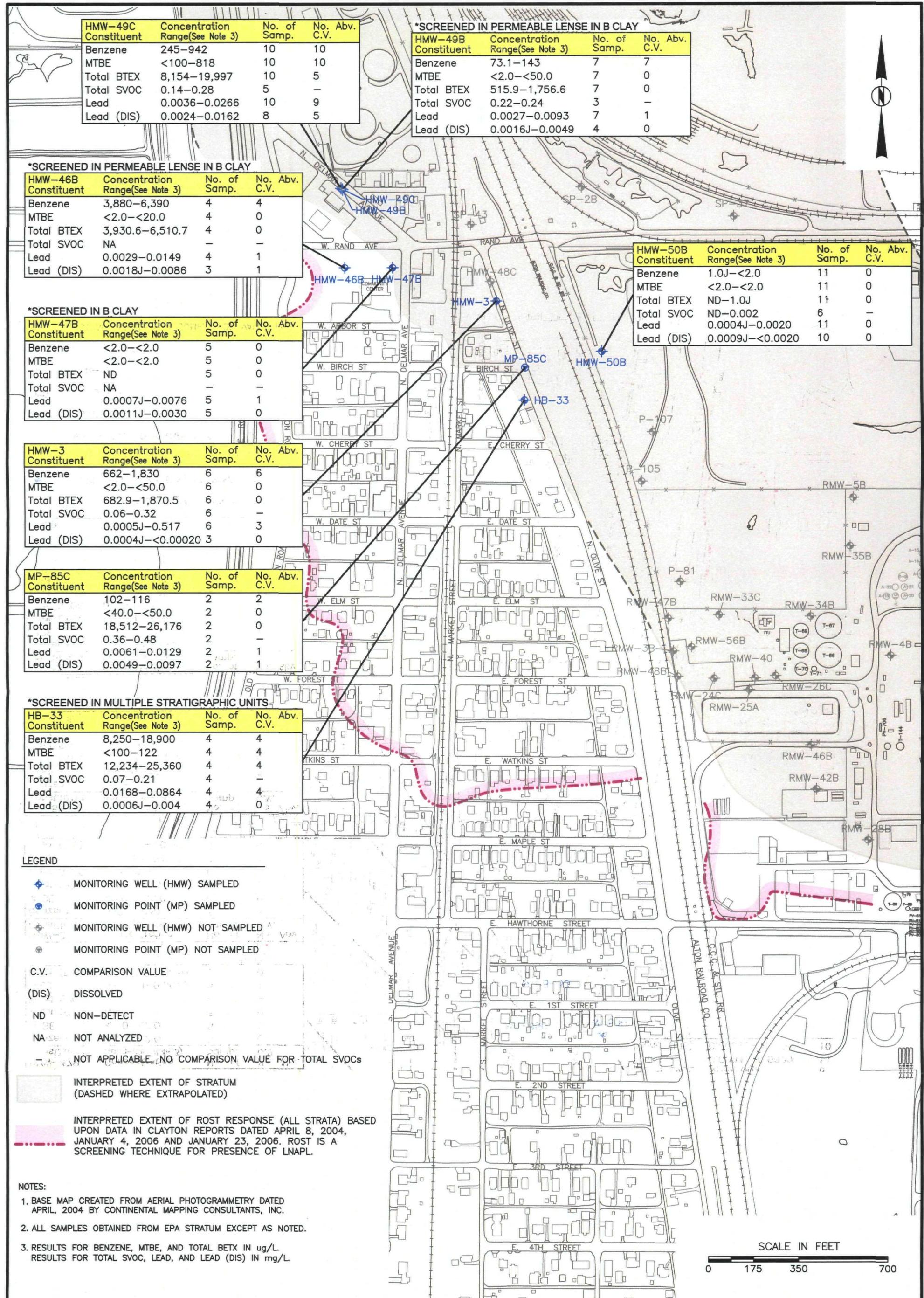
SUMMARY OF GROUNDWATER ANALYTICAL RESULTS
DECEMBER 2003 – JANUARY 2007
NORTH OLIVE STRATUM
THE HARTFORD AREA HYDROCARBON PLUME SITE
THE HARTFORD WORKING GROUP
HARTFORD, ILLINOIS



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CHECK BY DWL
DRAWN BY OS/BCP
DATE 2-8-07
SCALE AS SHOWN
CAD NO. 0309514011v1
PRJ NO. 003095.17

SUMMARY OF GROUNDWATER ANALYTICAL RESULTS
DECEMBER 2003 - JANUARY 2007
EPA STRATUM
THE HARTFORD AREA HYDROCARBON PLUME SITE
THE HARTFORD WORKING GROUP
HARTFORD, ILLINOIS



BUREAU
VERITAS

FIGURE
F-3

